

iPad & iPhone user

APPLE WATCH

Everything you need to know about
this year's must-have iPhone
and iPad extra



Welcome...

Welcome to this issue of *iPad and iPhone User*, the only guide you need to the wonderful world of iOS.

Soon we may to change our name, as Apple has added a new product to the iPad and iPhone family: the Apple Watch. But before you take out a subscription to *iPad & iPhone & Apple Watch User*, you'll want to turn to page 3 to find out everything you need to know about Apple's wearable.

The Apple Watch isn't the first ever smartwatch, and it doesn't really do anything other smartwatches don't do. But what it does do, it does better than the competition, thanks to Apple's user interface expertise. The company has paid an enormous amount of attention to every last detail of this watch and it shows.

It looks like something that people with a bit of fashion sense would want to wear, and it a device that the rest of us might actually wear, too. The Apple Watch may well be the smartwatch that converts the masses to the benefits of wearable technology. We can't wait to get our hands on one, and nor should you.

Even if you are not watching out for the Watch, this issue of *iPad & iPhone User* contains our usual mix of iPhone and iPad news, reviews, tips and tricks. Enjoy!



Apple Watch

After all the waiting Apple's smartwatch is finally here

It's six months since we were treated to our first look at the Apple Watch. Now, the wait to get our hands on the device is almost over. Over the following pages, we've got everything you need to know.

Launch date

The Apple Watch will launch on 24 April in Australia, Canada, China, France, Germany, Hong Kong, Japan, the UK and the US.

Price

Three models are available: Apple Watch, Apple Watch Sport and Apple Watch Edition. Each of these is available in a variety of colours and two face sizes: 38- and 42mm.



Apple Watch Sport

- 38mm Silver Aluminium Case with White Sport Band, £299
- 42mm Silver Aluminium Case with White Sport Band, £339
- 38mm Silver Aluminium Case with Blue Sport Band, £299
- 42mm Silver Aluminium Case with Blue Sport Band, £339
- 38mm Silver Aluminium Case with Green Sport Band, £299
- 42mm Silver Aluminium Case with Green Sport Band, £339
- 38mm Silver Aluminium Case with Pink Sport Band, £299
- 42mm Silver Aluminium Case with Pink Sport Band, £339
- 38mm Silver Aluminium Case with Black Sport Band, £299
- 42mm Silver Aluminium Case with Black Sport Band, £339





Apple Watch

- 38mm Stainless Steel Case with White Sport Band, £479
- 42mm Stainless Steel Case with White Sport Band, £519
- 38mm Stainless Steel Case with Black Sport Band, £479
- 42mm Stainless Steel Case with Black Sport Band, £519
- 38mm Stainless Steel Case with Black Classic Buckle, £559
- 42mm Stainless Steel Case with Black Classic Buckle, £599
- 38mm Stainless Steel Case with Milanese Loop, £559
- 42mm Stainless Steel Case with Milanese Loop, £599
- 38mm Stainless Steel Case with Black Modern Buckle, £649
- 42mm Stainless Steel Case with Black Modern Buckle, £599





- 38mm Stainless Steel Case with Midnight Blue Modern Buckle, £649
- 42mm Stainless Steel Case with Midnight Blue Modern Buckle, £599
- 38mm Stainless Steel Case with Soft Pink Modern Buckle, £649
- 42mm Stainless Steel Case with Stone Leather Loop, £599
- 38mm Stainless Steel Case with Brown Modern Buckle, £649
- 42mm Stainless Steel Case with Light Brown Leather Loop, £599
- 38mm Stainless Steel Case with Link Bracelet, £819
- 42mm Stainless Steel Case with Link Bracelet, £859
- 38mm Space Black Case with Space Black Stainless Steel Loop, £899
- 42mm Space Black Case with Space Black Stainless Steel Loop, £949

Apple Watch Edition

- 38mm 18-Carat Rose Gold Case with White Sport Band, £8,000
- 42mm 18-Carat Rose Gold Case with White Sport Band, £9,500
- 38mm 18-Carat Yellow Gold Case

with White Sport Band, £8,000

- 42mm 18-Carat Yellow Gold Case with White Sport Band, £9,500
- 38mm 18-Carat Rose Gold Case with Rose Grey Modern Buckle, £13,500
- 42mm 18-Carat Rose Gold Case with Black Classic Buckle, £12,000
- 38mm 18-Carat Rose Gold Case with Bright Red Modern Buckle, £13,500
- 42mm 18-Carat Rose Gold Case with Midnight Blue Classic Buckle, £12,000



Straps and accessories

If you get fed up with the supplied strap and fancy a change, Apple offers a selection for you to choose from. At the time of writing these ranged in price from £39 to £379.

How to order an Apple Watch

On 10 April, it will be available for pre-order through the Apple Online Store. Go to store.apple.com/uk.

How to see the Apple Watch right now

From 10 April you will be able to try-on an Apple Watch by appointment at Apple's retail stores. It will also be available to preview or try on at Les Galeries Lafayette in Paris, Isetan in Tokyo and Selfridges in London from 10 April.

Design

As you'll have seen in our price listing, the Apple Watch will be available in three categories – Apple Watch, Apple Watch Sport and Apple Watch Edition

– and two different sizes – 39- and 42mm. There are 38 different combinations for you to choose from, based on the different cases and straps. The cases on offer include Stainless Steel, Silver Aluminium and 18-Carat Rose Gold. There are six interchangeable straps for you to choose from, including Milanese Loop, Sport Band and Modern Buckle.

The Apple Watch is the standard model and comes with a polished case made from a custom alloy of stainless steel.

Next up is the Apple Watch Sport is a ruggedised device and features strengthened Ion-X glass face, so it should be able to take some bashing. Made from anodized aluminium, it's the lightest model.

The final option is the Apple Watch Edition. Designed for the fashion-conscious, cases are available in 18-carat yellow- or rose gold cases.

In an interview at the London Design Museum, Jony Ive explained the decision to make the Apple Watch is so customisable. “One of the biggest challenges that we found was that we couldn’t all be sitting there wearing the same thing. I don’t think we want to wear the same thing. Which is why we developed this system, not a single product.”

Battery life

According to Apple, the Apple Watch’s battery will last for 18 hours. As for charging the device, this will be easy thanks to a specially-designed charger that combines MagSafe technology with



inductive charging. This means that you need only hold the charger near the back of the watch, and the magnets will help it snap into place automatically.

iPhone compatibility

In order to use the Apple Watch, you'll need an iPhone 5, 5s, 5c, 6 or 6 Plus. However, while the smartwatch requires an iPhone to work, you won't need to keep the two devices close to one another the whole time.

Digital Crown

The dial on the side of the watch has been brought into the 21st century and turned into what Apple calls the 'Digital Crown'. This solves the problem of swiping through icons on a minuscule display.

You can use it to zoom in on interface elements and scroll through content on the watch face, without your fingers obscuring the view. It reminds us a little bit of an iPod's Click Wheel and can be used to navigate through lists as well as zoom in on data, maps or photos.

Below the Digital Crown is another button. This takes you to the home screen and to the Friends





app, from which you can contact your friends.

This button is also used when you're paying for things using Apple Pay.

When first announced there was some concern that the positioning of this dial on the right-hand side of the watch face would mean that left-handed people wouldn't be able to use the Apple Watch. Apple wouldn't be so daft as to rule out a huge bunch of people. Obviously, as with the iPhone, the interface can be displayed in any orientation, so you turn your watch face around to flip the UI over to the correct orientation for you.

Force Touch

This doesn't mean that the watch face isn't touch-sensitive. You can tap and swipe the Apple Watch face (see above image). In fact, the device is able to determine just how hard you touched the screen. It can distinguish between a regular tap, used to

select things, and a harder press, used to access contextual menus. Apple refers to this technology Force Touch. It is made possible by tiny electrodes that are embedded in the display.

You can swipe the screen to access summaries of things like your location, the weather and your calendar. Apple calls these mini apps Glances. They show you only the most relevant information from apps in a format that suits the Watch's screen.

Taptic feedback

The Apple Watch incorporates what the tech giant is calling a 'Taptic Engine'. This enables it to 'tap' your wrist to alert you to notifications. These notifications could be for messages from friends, or they could be to tell you to turn left or right when following directions – there are different kinds of taps depending on which direction you take.

It's similar to the vibrate function on an iPhone, except that only you know that you are being nudged. Let's face it, when your phone vibrates everyone knows when you get a call, even if you have the sound off.

Digital Touch

There's another feature of the Apple Watch interface that centres around touch. Apple calls it 'Digital Touch', and it's a quick and clever way of contacting friends via their Apple Watches in a way that suits the constraints of the interface.

You can use it to draw on your watch face and send that to your friend, and you can even hold down two fingers in Digital Touch to send your

heartbeat. This shows up on your friend's watch as a glowing, pulsing heart. It's a fair bet that Apple's hoping couples will buy his-and-hers watches.

Siri

The other way you can interact with the Apple Watch is via Siri. Just raise your wrist and say "Hey, Siri", or press and hold the Digital Crown and you can dictate messages or request turn-by-turn directions.

Apple Watch companion app for iPhone

iOS 8.2 beta reveals that an Apple Watch companion app for iPhone is in development, according to website 9to5Mac. This brings to

light a host of features available to the smartwatch. For example, the app will allow users to view a virtual representation of the watch's home screen on their iPhone, and use this to organise and manage apps.

There are also some new features for the clock, including a red dot that appears on the Watch when a notification is received on the iPhone, plus a new Monogram complication.

With messages you can opt to send an automatic reply or dictate your response, and you can set up read receipts and specify



from whom you should receive messages on the Apple Watch. For security, you can also set a passcode, and opt to wipe the Watch's data if it is incorrectly entered 10 times.

Apps

Apple has redesigned some of its apps to suit the watch's UI. You'll be able to 'Glance' at Messages, Mail, Weather, Calendar, Maps, Passbook, Music and Photos. Safari is absent, though. It's also offering brand-new apps, including Workout, Activity and Camera Remote.

Third-party apps

You can expect to see a few third-party apps on the Apple Watch at launch. These include offerings from Facebook, Twitter, TripAdvisor, eBay, Sky Guide, ESPN and Shazam.

Health and fitness features

Much of the focus has been placed on the fitness and health apps being built for the Apple Watch.

Apple showed off its own Activity app, which uses three circles to demonstrate how close you are to meeting your targets for calories burned. The Move ring (pictured) displays how many calories burned, the Exercise ring shows how active you've been, while a Stand ring keeps tabs on those times when you weren't



moving. When you meet your daily goal for each ring, you earn an achievement.

There is also a **Workout** app that will show you how far, how fast, and how long you've been exercising. These apps sync with your iPhone so you can track your progress over time.

The watch is able to track this information because it includes sensors that can track your steps and heart rate. Steps are tracked via an accelerometer (found in most smartphones), and a 'Custom' sensor uses visible-light and infrared LEDs and photodiodes on the back of the device to determine your heart rate.

The Apple Watch is able to determine how far you have run or walked based on the GPS data from the iPhone it is paired with – the Apple Watch doesn't feature a GPS chip itself.

Apple Pay

To make a payment with Apple Pay (Apple's mobile payment system), you'll need to use the button located just below the Digital Crown. Simply, double-click it and hold up your watch to a payment reader. This is made possible because the Apple Watch includes an NFC chip (as rumoured).

To ensure your card details are kept safe, the watch has a dedicated 'Secure Element' chip



that stores encrypts the information. It doesn't store your actual credit card number, but a 'device account number' that is used to create a single-use security code to authorise each transaction.

For added security: if you take the Apple Watch off, it'll lock and require a code before you can purchase anything. The device's rear sensor can tell whether the watch is being worn and you need to enter a PIN when you put it on before you can use it. Thieves who don't know your code won't be able to use the watch.

iPad & iPhone User's buying advice

The Apple Watch isn't the first ever smartwatch, and it doesn't really do anything new. But what it does do, it does better than the competition. Apple has paid an enormous amount of attention to every last detail of this watch and it shows. Indeed, it looks may well be the smartwatch that converts the masses to the benefits of wearable technology.





Pebble Time vs Apple Watch

We look at how the two smartwatches measure up

Even though the smartwatch game started pretty slowly, as time goes by it seems like every man and his brother are bringing out smartwatches for both Android and iOS. Pebble, which successfully funded its original smartwatch on Kickstarter back in May 2012 has headed back to

the platform to get funding for the next generation Pebble Time (and Pebble Time Steel).

Apple has also thrown its hat into the smartwatch ring, with the release of the Apple Watch (read our in-depth guide on page 3). But how do the two compare? Read on to find out.

Design

Design wise, the Pebble Time has gone on a diet as its 20 percent thinner than its predecessor, measuring just 9.5mm thick. It can be worn on both your left and right wrists, which is handy because not everyone wears a watch on the same wrist.

When the Apple Watch was first unveiled, there was concern that it was right-handed only, but the watch face rotates, so it can also be worn on both hands. The crown, typically used to adjust the time on a watch has been reimagined for use with the Apple Watch. It's now the primary control to navigate around the Apple Watch interface (apart from the touchscreen but we'll come to that).

There are multiple versions of both watches. The Pebble Time comes in three colours: black, white and red and the Pebble Time Steel comes in stainless steel silver, gunmetal black and gold. They support interchangeable watchstraps so that you can personalise your watch for different occasions.

There are more variations of the Apple Watch than Pebble Time. There's the standard Apple Watch that will be available with stainless steel or space black steel cases, as well as the Watch Sport with anodized aluminium in silver or space grey. Apple has also created the Watch Edition for those with

money to burn, which comes in an 18-carat gold body in either yellow or rose gold. As well as the different variations of the watch, each one also comes with two screen sizes (38- and 42mm) as Apple combats the issue of many smartwatches being too large for slender wrists.

As well as colour options for each Apple Watch, a variety of interchangeable straps are available for each type. The Watch Sport, for example, comes with more colourful and durable straps than the Watch or Watch Edition for obvious reasons. There are a total of 38 available combinations.

When you compare the photos of the Apple Watch Edition and the Gold Pebble Time Steel, there's an uncanny similarity between the two. Is Pebble actively going after potential Watch Edition customers and offering them a cheaper alternative?

Display

The display is really where the difference between the Apple Watch and Pebble Time is noticeable.



Pebble has decided that like the first generation smartwatch, the Pebble Time will have an ePaper display. The only difference is that this time its injected a boost of colour into the screen. The display isn't touchscreen though – the input is solely from the buttons on the side of the watch.

If Pebble wanted to use a colour screen, why not use LCD/OLED screens similar to other smartwatches?

Simply put, the eColour screen consumes far less battery power than a standard smartwatch screen and in doing so, allows the Pebble Time screen to stay on constantly and last up to seven days on a single charge.

Apple, on the other hand, has gone all out on the Apple Watch display. Boasting an incredible pixel density around 330ppi, the Watch and Watch Edition have a sapphire display. Sapphire is one of the hardest transparent materials in the world – second only to diamond. The Watch Sport, however, comes packing strengthened Ion-X glass.

It also has touch screen input technology that can sense force and tell the difference between a tap and a hard press – technology that will be critical to using the Apple Watch.

With all this technology and limited battery power, the Apple Watch won't have an always-on screen





like the Pebble Time; instead the screen will turn on whenever you raise your wrist to use it.

Battery life

Even though they may look very similar, the Pebble Time and Apple Watch have a range of unique features. The Time's battery life is definitely one of its most attractive features as it can last up to seven days on a single charge. While seven days is great, the Pebble Time Steel boasts a battery life that'll last up to 10 days.

Apple can't compete with these kinds of battery life stats – it's 18 hours. Thanks, however, to Apple's MagSafe technology, the device is easy to charge.

Water resistance

The Pebble Time does offer water resistance and can be used in the shower, something that the Apple Watch may not have. Even though it was originally stated that the Apple Watch could handle rain, it couldn't be used in a shower. However Tim Cook reportedly told employees at an Apple Store in Berlin that he wears his Apple Watch everywhere, "even in the shower" so it may be revealed that the water resistance is better than first imagined.

Companion device

One feature that the Pebble Time has is that, unlike the Apple Watch that requires the user to have an iPhone for the setup and most features, it has the ability to work with both Android and iOS. That's not to say that it performs equally on both platforms, though. Using the Pebble Time's built in mic with the Android OS enables you to send voice replies to incoming notifications (SMS, WhatsApp, Facebook Messenger, and so on), whereas on iOS, it's limited to voice replying to Gmail notifications.

Unique features

The Apple Watch introduces technology not used in any Apple product before: the Taptic Engine. According to Apple's website, its "a linear actuator inside the Apple Watch that produces haptic feedback". Translated into simple terms, you'll feel a tap on the wrist when you have a notification – not like the over the top vibration that other smartwatches have that seem to notify everyone else in the room as well as yourself. It'll give you a recognisably different sensation for different kinds of interaction and it even allows you to send your heartbeat to someone, for them to feel it on their wrist. It's almost sickeningly romantic, but still a pretty cool feature to have.



Apps

Content plays a huge part in the success of any smartwatch. No one would be



interested in a smartwatch that has a lack of good content (apps, information) no matter how good the watch may look. The Pebble Time has the added bonus of being compatible with the 6,500 apps & watch faces that were available for the first generation Pebble. Apps include a range of fitness and sleep trackers, something that more people are becoming interested in.

However the Apple Watch has no previous generation and therefore no existing material to port over. That doesn't worry Apple though – the company released the Apple Watch API to developers months ago in the hope that there will be content available from day one. These won't be native apps, as you'd expect, but rather extensions from the parent iOS app – for example, if you have Clear installed on your iPhone, you'll be able to check off points from your lists from your Apple Watch.

Health and Fitness

You'll also get a dedicated health and fitness system with the Apple Watch that'll collect data via sensors on the watch and sync with your Health app, available in iOS 8. It'll serve up daily goals, notifying you as you pass them.

While there is no direct support for a health and fitness system on the Pebble Time, it does have an API that developers can (and do) use to turn the watch into a fitness tracker, feeding information to your phone about workouts, steps, sleep, and so on. The Pebble Time is compatible with RunKeeper, Misfit and Jawbone just to name a few.

Notifications

Pebble Time marks the release of an updated Pebble UI called 'Timeline'. Instead of all your notifications being hidden inside their own apps, like they are now, they'll now be laid out chronologically. With a single click you'll be able to see what you've got coming up – the watch connects to calendars, alarms and apps, organising all the most relevant information for you. Similarly, you'll be able to do the same for the past and scroll back to that missed notification or recall how many steps you took yesterday.

The Apple Watch offers notifications that you'll be notified by a tap on your wrist. You'll then be presented with actions that you can select directly from the Watch, such as favouriting a tweet that you've just been mentioned in, similar to how notifications work on iOS 8.

Interface

The Apple Watch user interface utilises the digital crown, a second button below the crown and the touchscreen. The watch face is touch-sensitive



and reacts to taps and swipes, as well as the level of pressure you are using, distinguishing between a regular tap and a hard press, which will access different menus.

There are three buttons on the side of the Pebble Time that are your key to navigation. These buttons allow you to browse through the smartwatch, using the top and bottom buttons to scroll through various menus with the middle button reserved for selecting. There's also a single button on the other side, which has the same purpose as it did on the previous generation – to go back a step and therefore completely negate the need for a touchscreen.

Pricing and release date

The Pebble Time Kickstarter campaign reached its \$500,000 target in just 17 minutes and at the time of writing was just under \$18 million. Pebble say the it's watch will be released in May with a retail price of \$199 (£132) but if you decide to back them now, you can get it for \$169 (£112).

The Pebble Watch Steel has a slightly longer wait, slated for a July release with a \$299 (£199) retail price and a backer's price of \$250 (£166).

Due to the response that Pebble has had in regards to the Time (over 64,000 backers), it's entirely possible that the release date will slip – especially for those that waited to back the project as it's organised on a first come, first served basis.

As mentioned in our previous article, you will be able to preorder an Apple Watch from 10 April, and it will be in the shops from 24 April. For a full list of prices see our price list on page 4.



iPhone 6 vs the rest

How Apple's iPhone compares to the competition

Apple iPhone 6

The iPhone 6 may be Apple's latest and greatest smartphone, but that doesn't mean it's the only good smartphone out there. In fact, over the past year or two, Apple's reputation as a leader in the smartphone market has begun to slip, as competition from the likes of Samsung, Sony, LG, HTC and more has become steadily more impressive as solid iPhone rivals have launched.

Here, we take a look at some of the iPhone 6's biggest challengers to find out how they compare to Apple's flagship. Let's first take a look at the iPhone

6 itself, which certainly has a lot going for it and is a fantastic smartphone to own.

Display

The iPhone 6 has a 4.7in display, which Apple describes as Retina HD. It's 1334x750 pixels, which equates to 326ppi.

Design

The design is one of the iPhone 6's biggest strengths. Apple is known for it's sleek, sophisticated smartphones and the iPhone 6 is no different. It's made with anodised aluminium available in Silver, Gold, Space Grey, and has a soft, curved design. Plus, it weighs just 129g and is 6.9mm thin.

Specs

Inside the iPhone 6 is Apple's A8 processor, paired with an M8 co-processor and 1GB RAM. It's a very powerful chip that beats many of its rivals in most of our benchmark tests.

Capacities: 16-, 64- and 128GB (no microSD card slot for expansion).

Connectivity: 802.11ac Wi-Fi, Bluetooth 4.0, 4G

Camera

The iPhone 6's camera is 8Mp with 1.5 micron



pixels and a dual-LED flash. It has an aperture of f/2.2 and a new feature is the autofocus with Focus Pixels. Video capabilities include 240fps slo-mo. We love the camera in the iPhone 6 – it's fantastic.

Additional features

These include the Touch ID fingerprint sensor, as well as the NFC chip that allows the use of Apple Pay (expected to launch in the UK in 2015).

Software

The iPhone 6 runs Apple's iOS 8.

Price

16GB, £539; 64GB, £619; 128GB, £699

LG G3

LG's newest flagship smartphone is the stunning LG G3, which has an absolutely incredible display. It's a solid iPhone 6 contender and our sister title *PC Advisor* lists it as the best smartphone of 2014.

Display

The LG G3 has a bigger display than the iPhone 6 at 5.5in, so is a closer rival to the iPhone 6 Plus. The display is Quad HD, at 2560x1449 pixels, equating to a whopping 534ppi.

Design

The overall design of the LG G3 isn't quite as sleek as the iPhone 6, but is by no means



unattractive. It has a plastic rear cover but does have some metal portions including the frame. It weighs 149g, so slightly more than the iPhone 6's 129g and is 8.9mm thick (compared with 6.9mm).

Specs

Inside the LG G3 is a Qualcomm Snapdragon 2.46GHz Quad-Core processor paired with 2GB RAM, or 3GB if you opt for the 32GB capacity model.

Capacities: 16-, 32-, microSD slot for up to 128GB

Connectivity: 802.11ac Wi-Fi, Bluetooth 4.0, NFC

Camera

The LG G3's camera is 13Mp, with a dual-LED flash, but doesn't have the bigger pixels so not necessarily better than the iPhone 6. It offers Optical Image Stabilisation (only offered by iPhone 6 Plus, not iPhone 6) and a new Laser Auto Focus feature.

Additional features

The LG G3 doesn't have a fingerprint sensor, but it does have a secure Knock Code system for unlocking the device. It also has a wireless charging feature achieved by purchasing a separate wireless charging unit, and LG's Rear Key button on the back.

Software

The LG G3 runs Android 4.4 out of the box, with an update to Android 5.0 coming soon.

Price

£439.99 (£100 less than iPhone 6), but you can find it for as little as £315 if you look around.

Sony Xperia Z3 Compact

Sony's Xperia Z3 is its current flagship smartphone, but unlike many of its rivals it offers a 'compact' or 'mini' model that has very similar specs despite its smaller size, so we've chose to use the Xperia Z3 Compact in our iPhone 6 comparison because it's closer in screen size.

Display

The Sony Xperia Z3 Compact has a 4.6in display, so is similar in size to the iPhone 6. It's 1280x720 pixels, which equates to 319ppi, slightly lower than the 326ppi of the iPhone 6.

Design

The Sony Xperia Z3 Compact has a more blocky design than the iPhone 6 (although it is smaller overall), but it's also more durable, with nylon corners for extra protection and an IP68 rating for dust- and waterproof to a depth of 1.5m. It weighs 127g so is 2g lighter than the iPhone 6, but is thicker at 8.6mm. It offers more colourful options though, with black, white, orange and green available.

Specs

There's a 2.5GHz Qualcomm Quad-core processor inside the Xperia Z3 Compact, paired with 2GB RAM and Adreno 330 graphics, making it a zippy device.



Capacities: 16GB, microSD slot for 128GB additional storage.

Connectivity: 802.11ac Wi-Fi, Bluetooth 4.0, NFC, 4G

Camera

The Xperia Z3 Compact has a cracking 20.7Mp camera with autofocus and a super-high ISO of 12800 for low-light photography.

Additional features

As mentioned above, the Xperia Z3 Compact is waterproof, which means you can take it swimming with you and capture underwater photographs. Plus, as it's made by Sony, it offers the PlayStation app to expand your gaming experience.

Software

The Sony Xperia Z3 Compact runs Android 4.4 KitKat and will soon run Android 5.0 Lollipop. Find out more in our iOS 8 vs Android Lollipop comparison.

Price

Although its RRP is £429, you can find it for £400 or less if you shop around.

HTC One M9

On to HTC's offering now, and the One M9 is the company's latest smartphone.

Display

The HTC One M9 has a 5in display, which is Full HD at 1920x1080 pixels and 441ppi, higher than the iPhone 6's 326ppi.

Design

Like the iPhone 6, the One M9 is made with scratch-resistant aluminium, so sports the premium design qualities of Apple's offering. Like the iPhone 6, the HTC is available in three similar colours: grey, silver and gold, though it has a two-tone effect on the sides. The HTC One M9 weighs more than the iPhone 6 at 157g, and is thicker too at 9.6mm.

Specs

The HTC One M8 manages to match the power of the iPhone 6 with a Qualcomm Snapdragon 810 64-bit octa-core processor paired with 3GB of RAM.

Capacities: 32GB with microSD slot for up to 128GB additional storage

Connectivity: 802.11ac Wi-Fi, Bluetooth 4.1, 4G, NFC



Camera

The HTC One M9 has a new 20Mp camera with a dual-LED flash. The dual-focus feature from the One M8 is gone, but we're told that it can still produce similar effects. Interestingly, the front-facing camera is 4Mp but with UltraPixels, and is much better than the iPhone 6's 1.2Mp front-facing camera.

Additional features

Front-facing speakers are something that the One M9 boasts but the iPhone 6 lacks, so that's a real plus for HTC here. It doesn't have a fingerprint sensor, though.

Software

The HTC One M9 runs Android Lollipop

Price

At the time of writing, the HTC One M9 was available to preorder for £579.99. It was due to be released on 31 March. Prices for the iPhone 6 start at £539.

Google Nexus 5

Although Google's latest offering is the Nexus 6, we feel the Nexus 5 is a closer rival to the iPhone 6.

Display

The Nexus 5 has a 4.95in display, with a great pixel density of 445ppi thanks to its 1920x1080 resolution.

Design

While the Google Nexus 5 is made with plastic, we quite like the overall look and feel of the device. It

weighs just 1g more than the iPhone 6 at 130g, but is a bit thicker at 8.59mm.

Specs

The Nexus 5 has a 2.26GHz Qualcomm Snapdragon 800 processor paired with 2GB RAM, with Adreno 330 graphics. It's a speedy device that scores better than the iPhone 6 in some of our processor tests.

Capacities: 16GB or 32GB. A downfall of this smartphone is that there's no microSD slot.

Connectivity: Bluetooth 4.0, 4G, NFC

Camera

Like the iPhone 6, the Nexus 5 has an 8Mp rear-facing camera. It offers Optical Image Stabilisation, but doesn't have the bigger pixels sported by the iPhone 6.

Additional features

The Nexus 5 doesn't have a fingerprint sensor or any other outstanding extra features, but as it's made by Google it is closely integrated with Android and already runs the latest version of the OS.

Software

That's right, the Nexus 5 runs Lollipop.



Price

With prices starting at £299, it's a bargain.

Samsung Galaxy S6

Now we come to Samsung's new offering. The Galaxy S6 is Samsung's all-new flagship smartphone as launched at MWC 2015, and is more iPhone-like than ever. Let's see how they compare.

Display

The Samsung Galaxy S6 has a 5.1in display so is slightly bigger than the iPhone 6. Its resolution is Quad HD, making a whopping pixel density of 577ppi, miles better than the iPhone 6's 326ppi.

Design

We're not overly keen on the design of the Samsung Galaxy S6. Samsung has tried a more premium look with a glass back, but it's mirrored which has a horrible blingy effect, and the edges look frighteningly similar to the iPhone 6. It comes in blue, black, white or gold. It weighs slightly more than the iPhone 6 at 138g and is a smidgen thicker, at 7mm. It no longer has a removable battery or waterproofing, so shares those downfalls with the iPhone 6.

Specs

The Galaxy S6 does match the iPhone 6 when it comes to power,



though, thanks to an octa-core processor and 3GB RAM.

Capacities: 32-, 64-, and 128GB.

Connectivity: 802.11ac Wi-Fi, Bluetooth 4.0, 4G, NFC

Camera

The Samsung Galaxy S6's camera is quite good, at 16Mp with fast auto-focus and Selective Focus. The front camera is 5Mp, too.

Additional features

The Samsung Galaxy S6 has a fingerprint sensor for unlocking the device, and also offers a heart rate sensor.

Software

The S6 runs Android 5.0 Lollipop.

Price

Samsung has not yet unveiled the UK pricing for the Samsung Galaxy S6, but MobileFun is now accepting pre-orders at £579 for the 32GB version. It will be available to buy from 10 April.

Nokia Lumia 930

Finally, a Windows Phone for you now. This one, the Nokia Lumia 930, launched in mid-2014 and is considered to be the best Windows Phone smartphone you can buy.

Display

The Nokia Lumia 930 has a 5in screen with an impressive pixel density of 441ppi thanks to its Full

HD resolution. It also has ClearBlack technology, which really improves the contrast to make the display even more bright and crisp.

Design

The bright design of the Lumia 930 won't appeal to everyone. It's heavy, at 167g, and is thicker than most of its rivals at 10mm.

Specs

Under the hood is a Qualcomm Snapdragon 800 processor with 2GB RAM, so it's nothing particularly special but is a powerful chip nonetheless.

Capacities: 32GB.

Connectivity: 802.11ac Wi-Fi, Bluetooth 4.0, 4G, NFC.

Camera

The camera is one of the standout features of the Nokia Lumia 930, at 20Mp, and with manual control over shutter speed, ISO, white balance, focus and more. There's a dual-LED flash, too.

Additional features

The Lumia 930 offers wireless charging, and the charger accessory you'll need is included in the box.

Software

Windows Phone 8.1.

Price

£435.





iOS 9 release date rumours

Everything you need to know about Apple's next iOS

IOS 8 has been with us for a couple of months, but we're already thinking about iOS 9. When will it come out, what features will it offer and which iPads, iPhones and iPod touch devices will it run on?

With three months to go before we're likely to even see a preview of iOS 9, we've not got much to go on. Mind you, we can make pretty confident predictions about iOS 9's launch date based on past behaviour (Apple is very much a creature of habit when it comes to iOS updates, so we've got a decent idea of when iOS 9 will come out), and there have been some reported sightings of iOS

9 in web analytics – although we're not convinced that this means iOS 9 is being publicly tested, as we explain further down.

Release date

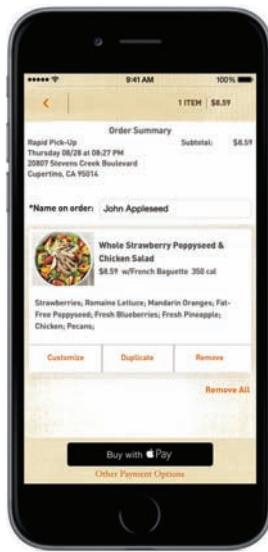
Apple updates its iOS software platform for iPad, iPhone and iPod touch once a year, as regular as clockwork. iOS 9 – which we hear is codenamed 'Monarch', after an American ski resort – will be unveiled at WWDC 2015 in the summer (and made available for beta testers and app developers), and then launch to the public alongside the next generation of iPhones in September.

New features and enhancements

Apple likes to include at least one showy marquee feature each time it updates iOS, something it can whip up some hype around at the launch presentation. iOS 8, for example, had Health, Continuity and Apple Pay (even though we still haven't got the latter yet this side of the Atlantic); while iOS 7 had Control Center, Touch ID and (later) CarPlay, iOS 6 had Maps and Do Not Disturb. So what will iOS 9 bring?

We're hoping for something a bit more exciting than this – and trust that Jonny Ive's team will capture our imagination as usual – but the main rumour we've been hearing so far is that iOS 9 will focus on speed and stability.

9to5Mac quotes sources who reckon that the Apple team working on iOS 9



are waging what it calls a “huge” effort to improve stability and increase speed, as well as zapping bugs that may hamper performance – to the extent that these efforts could even be touted as the principle benefit of updating.

Many iPhone and iPad owners may be baffled by this, since the iOS experience on reasonably up-to-date iPads and iPhones is extremely slick and smooth. But for anyone who’s tried to stick with an iDevice for more than a few years, this will sound like a godsend. iOS 7 and -8 were both widely criticised for hobbling the speed of devices at the lower end of compatibility.

After all, you can’t keep adding whizz-bang features and expect legacy devices to cope with the extra demands without suffering performance dips, which is why an iOS update that takes that side of things seriously would be something to applaud.

9to5Mac adds that iOS 9 will also see more serious efforts to minimise the size of install files, which makes a lot of sense after the debacle surrounding iOS 8.

Compatible devices

Every time Apple updates iOS, it adds a couple of new iPads and iPhones to the list of compatible devices, and knocks one or two older ones off.

At time of writing, the following devices are compatible with iOS 8:

- iPad 2, 3, 4, Air, Air 2
- iPad mini, 2, 3
- iPhone 4s, 5, 5c, 5s, 6, 6 Plus
- iPod touch (fifth generation)

iOS 9 will very likely launch alongside a new iPhone (or set of iPhones) and will of course be compatible with them. Most likely it will be followed by new iPads a month later, and again, will work with them. But we can also expect to lose some devices from that list. Here's our prediction of the iPads, iPhones and iPod touch models that will run iOS 9:

- iPad 3, 4, Air, Air 2, Air 3*, Pro*
- iPad mini 2, mini 3, mini 4*
- iPhone 5, 5c, 5s, 6, 6 Plus, 7 series*
- iPod touch (fifth generation)

Devices marked with a * are unconfirmed, and may have different names – or never launch at all. We've only put one entry for the new iPhones, but there's a decent chance we'll see more than one: perhaps an iPhone 6c and an iPhone 7? Opinions on this are divided in the *iPad & iPhone User* offices.

What's our thinking with these predictions? Well, iPad compatibility has historically moved upwards quite slowly: the iPad 1 was the bottom rung for three versions of iOS/iPhone OS, and now the iPad 2 has done the same. The iPad 2 has also been recorded as suffering some speed issues with iOS 8. We think its time has come.

The iPad minis are harder to predict, because we've got no historic data to go





on: all three models run iOS 8, and we have no idea how long Apple expects them to last. But the first-generation option is starting to feel pretty slow compared with the two newer models, and could well drop off compatibility with iOS 9.

iPhones tend to move quicker, lasting as the bottom rung for one or two versions. The iPhone 4s has been bottom for only a single version (the iPhone 4 could run iOS 7) but plenty of people have claimed that iOS 8 slowed down their 4s handsets. We don't expect the 4s to be able to run iOS 9.

Finally, it would be a dramatic move for Apple to remove the iPod touch line entirely from iOS 9 compatibility, so this may depend on whether Apple updates it. If it doesn't, we'd expect the 5G iPod touch to remain compatible with the latest update.

A final note: one of the iOS 9 rumours we've been hearing is that the next iOS update will focus heavily on providing an exceptionally stable and fast user experience. Hopefully this will be achieved via ruthlessly efficient coding and the avoidance of

feature creep. But another method would be to raise the compatibility bar quicker than usual and exclude devices more than, say, two years old. This would be bad news for the iPhone 5 and the iPad 3 and 4.

Concept

It's very early days, and we don't expect leaked screenshots to start appearing for a while yet. But a few designers and artists have started coming up with design ideas for iOS 9's interface.

One we particularly like is one by Yasser Farahi (see below). It's part of a set devoted to conceptualising the iPhone 7. As you can see, Farahi has imagined the unimaginable and turned iOS's icons into circles. It was said that the rectangle with rounded corners was Steve Jobs' favourite shape, and we've all been tapping rounded-square icons for so long that circular icons just look wrong, but also radically new and vaguely exciting.





iOS 9 wishlist

The features we'd like to see in Apple's upcoming iOS

So much for the rumours and speculation about when iOS 9 will launch, and which devices it will run on. But what features can we expect in iOS 9? Hopefully Apple will include some of these.

Proper parental controls

iOS 8 has reasonably decent parental controls: you can go into Settings and set quite detailed restrictions on the categories of music and films that can be played, the apps that can be used, the websites that can be visited and the settings that can be changed. The problem is that these then

apply globally, to anyone who uses the device, until you enter a passcode and switch them all off.*

Microsoft has demonstrated a better way to do this, with Kid's Corner on Windows Phone 8, and Android devices also offer more user-friendly parental controls.

More powerful, too. As well as per-account restrictions (which links to our next request, below), we'd like to see extra types of parental control in iOS 9: one possibility would be time limits on certain apps so that you can allow access to games but for a limited duration. If you could specify content types as well – so that all games are restricted en masse but educational apps are positively encouraged – that would be ideal.

* You can also use Guided Access to keep a child in a single app, of course, although that creates other headaches and definitely doesn't encourage general familiarity with the device. And by the way, have you tried using Restrictions? Disallow certain apps, allow them again and – abracadabra – the app icons have all been moved around the screen. It's a bit of a mess, to be honest.

Multiuser support/user accounts

Following naturally on from parental controls, many users would love to be able to log into iOS under a specific user name or account, enabling their preferences, bookmarks, apps and media content to be kept separate from someone else who uses the device regularly. This would be convenient and allow for a more personalised experience, as well as making parental controls easier to implement.

And you could have a 'guest' account to stop visiting family from jumping on to your social media accounts and viewing all your photos.

Perhaps Apple would prefer us to all buy our own personal devices, but its creation of the Family Sharing feature suggests that it might be open to this concept in iOS 9.

FaceTime video messages

My retired parents and parents-in-law all have far busier social lives than I do, and it's not unusual to find that they're out when my son and I call them on FaceTime. By the time they call back the youngster has often gone to bed, and they have to settle for a conversation with me.

Wouldn't it be nice for us to be able to leave them a video message? I always find it odd that you can't. Perhaps someone has worried that they would use up too much storage, but you could always make it an optional feature that's enabled at the recipient's end – and you could cap the messages at 30 seconds, which at 720p shouldn't take up all that much space.

Group FaceTime calls

And another thing about FaceTime... Skype allows group conversations between up to 10 people, and it feels like Apple



is handing an advantage to its rival by limiting FaceTime calls to just two.

Split-screen multitasking

This was heavily rumoured in the run-up to iOS 8's launch, and is again doing the rounds in reference to Apple's semi-mythical iPad Pro. There's a reason for that: it's an incredibly appealing idea.

iOS 8 allows a degree of app multitasking, but rather than just previewing screens in multitasking we'd love to be able to interact with two screens in tandem: comparing a web page with a Pages document while making notes, for example, or checking a text of suggested dates against your availability in Calendar. They wouldn't even need to be related: many of us would like to be able to view an entertaining video while putting together a piece of work, even if it might affect productivity.



Concept illustration by Ramotion.

This, of course, makes more sense visually on the iPad, because of its larger screen, but the iPhones are getting so big now that it's not an impossibility in the smartphone format.

The ability to change default apps

Apple is a brilliant company that leads the world in multiple fields but (say this quietly) it isn't automatically the best at everything. Building browsers, for instance: you've got to be a reasonably hardcore Apple fan to reckon that Safari is indisputably the finest mobile web browser available to humanity, even if most of us think it's okay.

Nope: a lot of iOS users would like to use Chrome, or Dolphin, or another rival web browser on our iPads and iPhones – but while that option is available, you can't make anything other than Safari the default browser, so Mail links, Twitter links and so on will always default back to Safari when you tap them. The same applies to mail apps, calendar apps and various other areas where Apple has a horse in the race but wouldn't beat all-comers if it hadn't hobbled the competition.

We'd love to see the option to pick your own default apps, so you don't have to use Apple's if you don't want to.

To delete or at least hide the defaults

For that matter, it's annoying that you can't delete any of the preinstalled Apple apps that are waiting on your device when you first power it up, for reasons of space and tidiness. Some are hard to object to, such as Messages (even though some

prefer to use WhatsApp, at least on iPhone). Others, such as Stocks and Newsstand would get the bum's rush the second Apple allowed it.

And if we can't delete them, Apple, at least let us hide them properly – the days of a forlorn folder on the last screen labelled 'Apple crap' should be past. A simple toggle in the Settings app to show or display each app is the least we ought to expect.

Battery-saving mode

Ask someone what they want from the next generation of iOS devices and they will nearly always mention one thing: "Better battery life!" Of course we agree, but we also recognise that battery life is a question of compromises, and just asking it to be better carries the implication that something else - price tag, weight, size – will get worse, or fail to get better when it could have done.

So instead let's get specific about what we'd do to improve matters. We think everyone would benefit from an optional, platform-wide battery-saving mode that would reduce brightness and volume, switch off Wi-Fi and Bluetooth, shut down unused apps and switch off location data and notifications. Competitors such as Samsung and Sony have introduced similar features to help prolong that vital last 10 percent of a smartphone's power, and there's no reason why Apple can't do likewise.

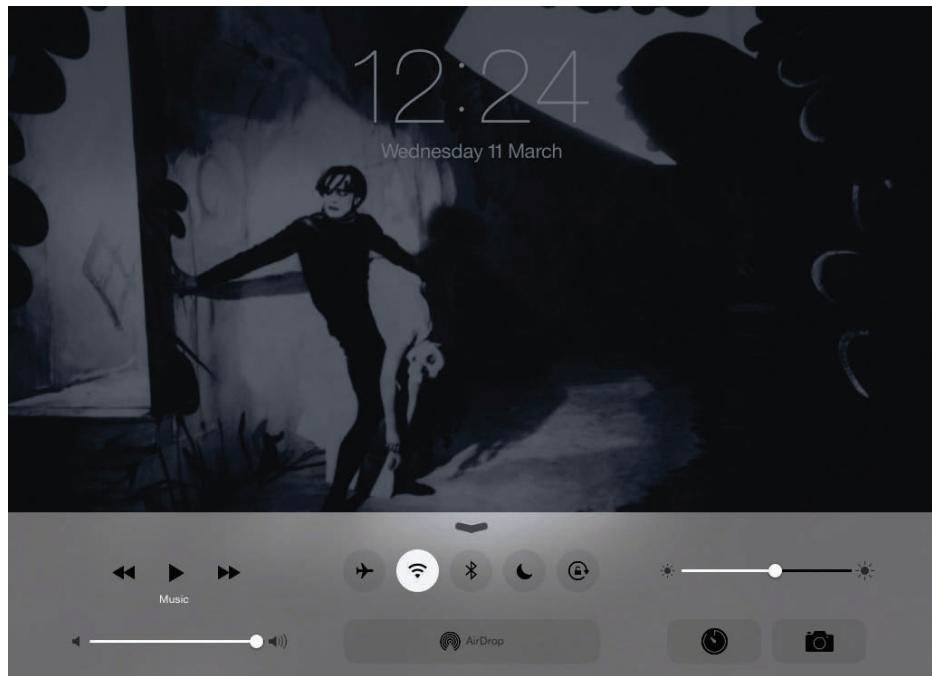
iPhones are notorious for fast-draining battery life so the option to disable all power-hungry functions with a single toggle in Control Centre, or to tell iOS 9 to automatically enter this mode when

it reaches a certain point of battery life, would be extremely welcome, and could save a few iPhones from dying at crucial moments.

Ability to add apps and settings to Control Centre

We mentioned Control Centre just now. We adore the convenience of this little bundle of regularly used toggles and sliders, but we think it could be even better with a tiny bit of customisability.

Say you never use Do Not Disturb mode, or prefer to access the Camera from the lock screen rather than from Control Centre (don't we all?). Wouldn't it be great if you could swap those controls out of the



Control Centre and replace them with other settings you use more often – such as switching vibrate on or off, or activating a preset range of Restrictions so you can hand the device straight to your child.

We'd also like to see the Wi-Fi SSID in Control Centre, so you can swipe up and quickly check which network you're connected to, instead of having to jump into Settings to sort it all out.

You could even add frequently used apps (or settings for those apps) to the Control Centre, or harmless kid-friendly games you don't mind being accessible without inputting a passcode.

Local Siri

The problem with Siri (other than self-consciousness when you're using it in a busy area) is that it sends every voice command back to HQ for decoding by Apple's back-end servers, which means it doesn't work when disconnected from the internet.

Surely the easier stuff – setting reminders and alarms, and firing off text messages – could be handled locally? This would be help when driving home with no mobile signal and trying to send a hands-free message such as "I'm running late".

Unplugged Hey Siri!

At the moment the Hey Siri feature is a pale imitation of the science-fiction dream it ought to be. iOS 9 can turn that dream into a reality.

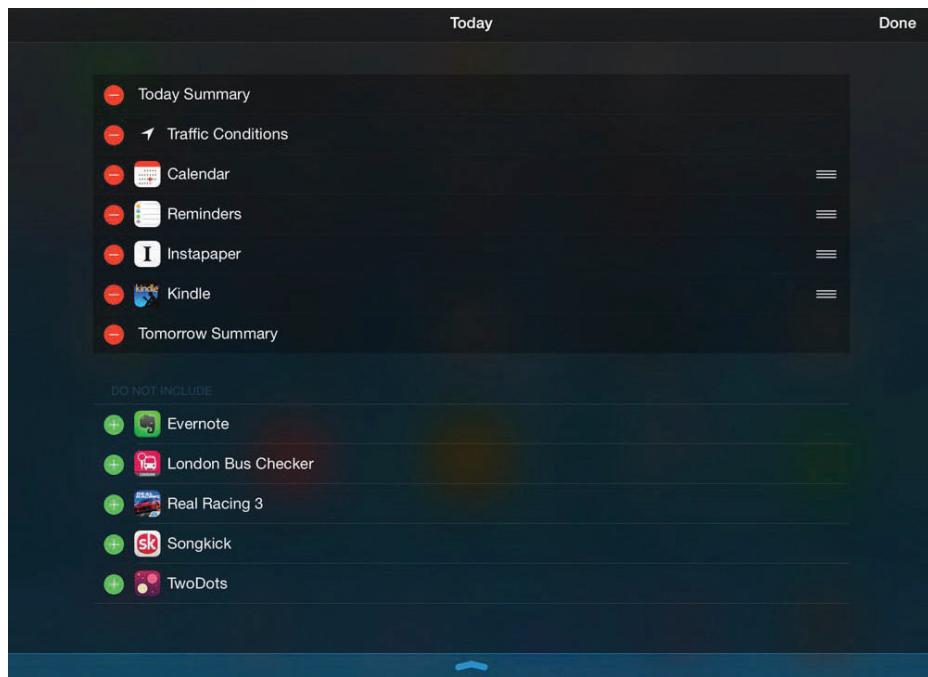
The problem is that Hey Siri is only available a tiny proportion of the time – you need to have your iPhone or iPad plugged in, in order for iOS to be listening out for your voice, for reasons of battery

preservation. We've love it to work unplugged too. iPhone sitting on the train table? "Hey Siri! Send an email to my wife."

Obviously Apple would want to implement fairly stern battery warnings when you chose to activate this option, but it would be nice to have the choice.

Home screen widgets

With iOS 8 Apple cautiously opened up to the idea of user customisation, allowing third-party system-wide keyboards and – yes – widgets to be installed (although Apple calls them Extensions). These are miniature versions of apps that sit in the Notification Screen and perform limited functions.

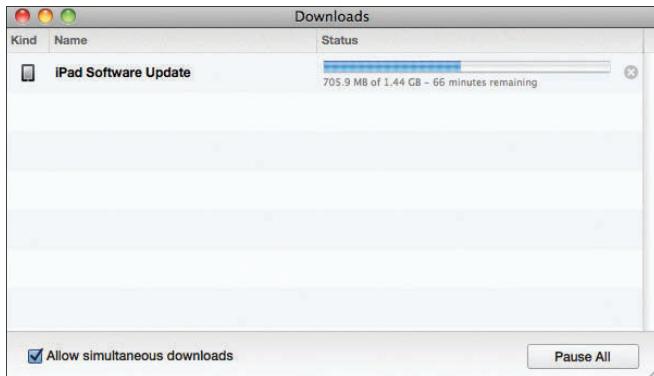


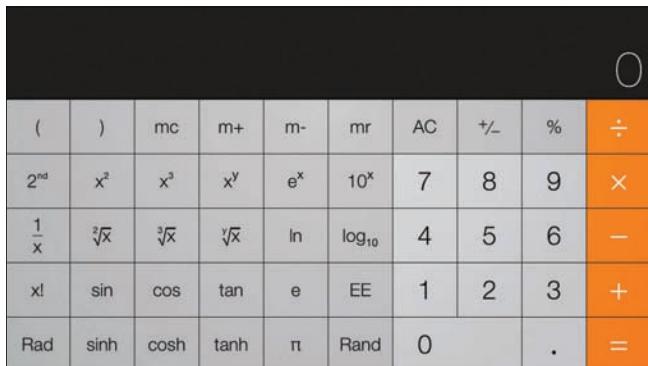
This is all great, but it would be better still if we could install the widgets in other places – such as on the Home screen itself, which is where widgets found fame on Android. Having a weather widget constantly sitting in the background of the Home screen could be handy, as could a sports news ticker.

Smaller file when upgrading iOS

This one, I'm afraid, is a little bit like the non-specific request for a better battery life. We'd just like the install file, when we upgrade from one version of iOS to another, to be smaller. (The latest iOS 8 update is a sizeable 1.44GB) We don't know the details, and we don't care how – we just want it to be smaller.

Yes, it's non-specific, and yes, it's probably incredibly annoying to hear if you're a software developer at Apple. But given the amount of storage available to the average iOS device – and remember that iOS is developed for Apple devices only, so this is a totally controllable environment – it is unacceptable that iOS 8 demanded 5GB or even 6GB in order to update. Many users had to clear





all of the media and most of the apps from their devices, and many more didn't update because they didn't want to do this – and a mixed-OS user base is the last thing Apple wants.

Calculator on iPad

iPads, for some inexplicable reason, don't get the Calculator app, which is a perfectly useful thing to have (particularly since it sits in Control Centre on the iPhone). It would be nice for iPad owners to get the same feature.

iMessage improvements

There are plenty of ways iMessage could get better. For one thing, it would be convenient to be able to tell Messages to always (by default) send messages as a text rather than an iMessage if the signal is bad. At the moment you have to wait for a message not to send before you can tap and select Send as Text, and that's pretty frustrating.

We'd also like to be able to set up groups for messages – and even better if you could alter those

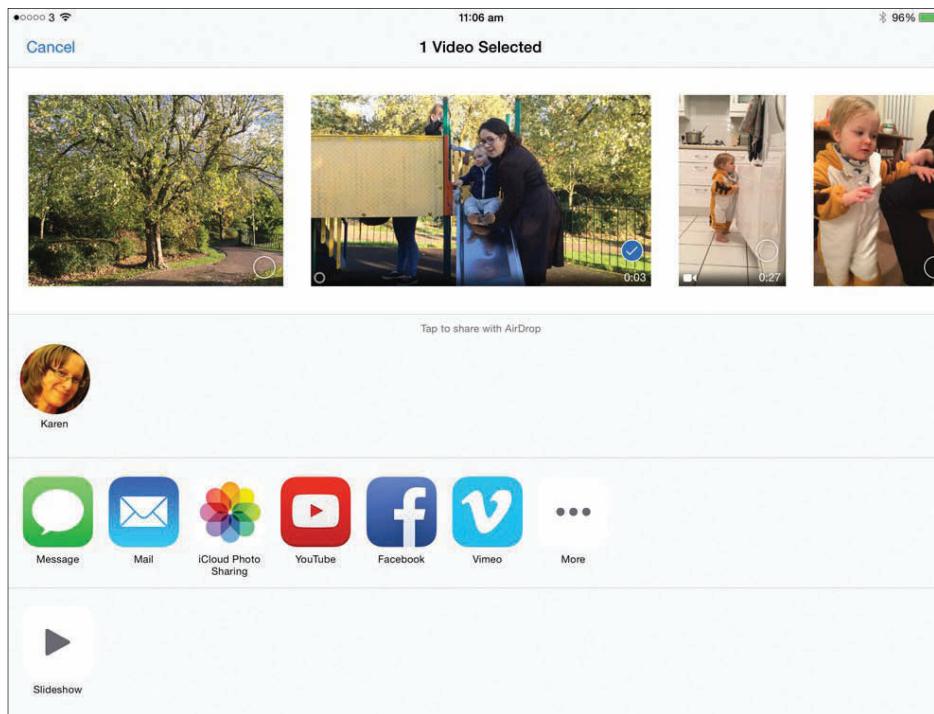
in the group list from time to time, perhaps updating it to add new friends or colleagues.

Mail improvements

Mail isn't perfect at handling groups either. It should be much, much simpler to emails a select group.

Wider social-media integration

Apple has allowed select social-media partners into the fold (sometimes it's hard to escape the feeling that these decisions are made with one eye on the political ramifications: what the partner can offer in return, and how it will affect Apple's direct rivals).



But there are plenty of popular companies that don't make it into the default sharing pane.

Vine is an obvious absentee from the sharing options from a video in Photos, but we really ought to be able to customise the list of options.

Public transport directions in Apple Maps

Simple, really: Apple Maps is playing catch-up with Google Maps in a few areas, but the most notable and important is public transport directions.

Google Maps can offer advice on which bus will take you where you want to go: where to board, and what time the bus will arrive. It does the same for train journeys. Apple Maps should do these things.

Improved integration between Contacts and Facebook

Contacts' ability to scrape contact information and images from Facebook can be quite handy, but it can also create headaches and muddled-up data. It's a process that could do with a bit of a spring-clean: to help avoid duplicated contacts, for one thing, and to neaten the whole thing up.

A better, easier Photos app

We're pretty sure this will get sorted in iOS 9, but it's still worth mentioning. Let's put it this way: Photos isn't the most user-friendly it's ever been.

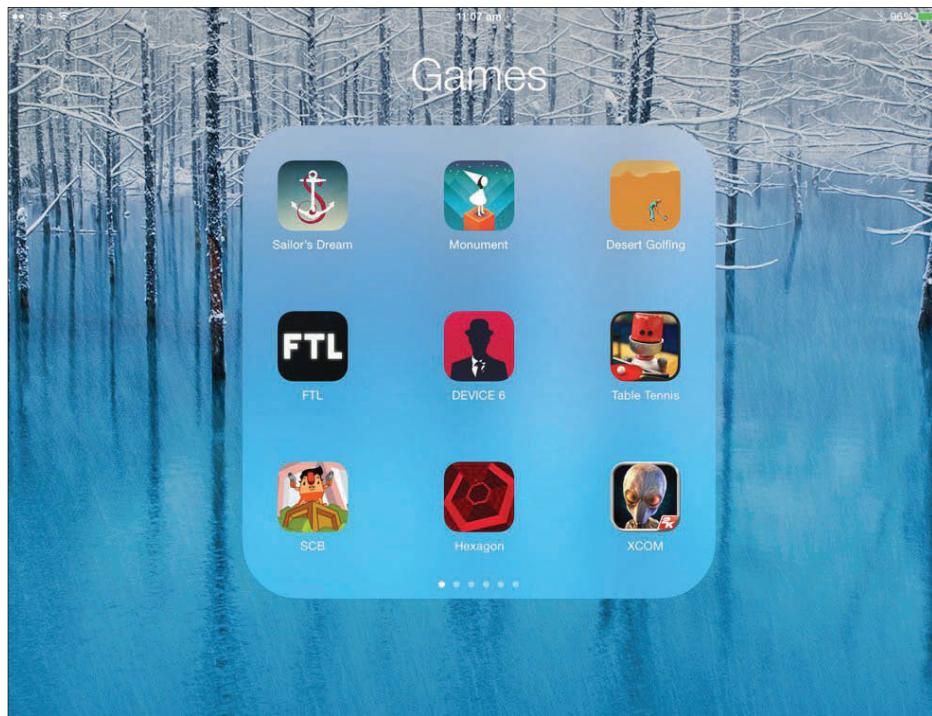
Try creating an album and adding photos to it: you'll find them in both the camera roll and the photo stream. Neat-freaks (like us) who try to tidy them up by deleting them from the camera roll will find that they are promptly removed from the album.

We'd like iOS 9 to incorporate a Photos app that doesn't involve so much duplication, and is generally a bit easier to use.

Subfolders

We use folders a lot: our first screen is mostly single app icons, but the second one is almost entirely folders. This is how I keep it to two screens.

But without wishing to overcomplicate matters, we'd love to be able to set up folders within folders. Take my big Games folder, for instance: this would benefit from subfolders for RPGs, driving games and so on.



It's not very Apple or very 'mobile' either, but it would help those of us with lots and lots of apps.

Block callers who hide Caller ID

I'll be honest here: I don't know the technicalities (and legalities) behind Caller ID, and the constraints they place on Apple's ability to block people who hide it. Because other than some weird legal loophole, I can't think of any sensible reason why Apple doesn't let you do this.

Since iOS 7 you've been able to block specific numbers, whether or not they're in your Contacts list. But as we all know, there's an easy way around that block: simply hide your Caller ID. Sure, the message No Caller ID will be prominently displayed when the call comes in, so the wise recipient will know that they probably shouldn't answer: it's a call centre, or pre-recorded spam, or your sociopathic ex-boyfriend. But you still get the annoyance of hearing the default ringtone, and wondering for a moment if something important is up.

(And you won't know absolutely for sure that it isn't. Maybe some well-meaning klutz has advised your mother-in-law to switch off the Caller ID on her iPhone? Of course that's not true, but a tiny part of you will still worry that maybe it is.)

So please, Apple: add a simple option that lets you block all calls that hide their Caller ID. You could add a message to the menu where you hide Caller ID that warns that this may happen. Even better would be if the blocked caller heard an automated message that explained why they weren't getting through.

Translation apps

The best speech, voice and translator apps for iOS

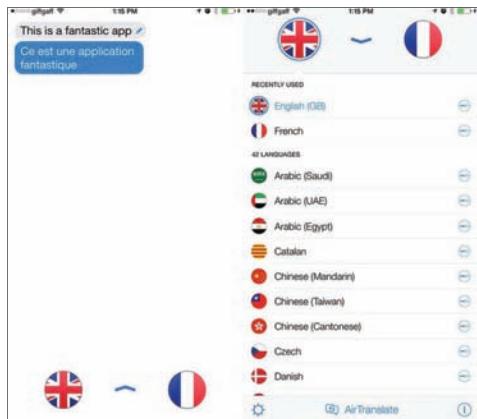
iTranslate Voice

Price: £2.99

The iPhone is a superb tool for when you're travelling abroad. Not only is it small, lightweight and internet-connected; it has a camera, speaker and microphone. The iPhone is also much more powerful than many people imagine. The modern iPhone really is a computer in your pocket.

Few aspects of modern computing are more powerful to witness than real-time language translation. Here we have the best speech, voice and text translator apps for iPhone. Some of these translation apps even work without the internet.

When it comes to translating the spoken word, iTranslate is the app you need. It's like Siri, if Siri could speak 42 different languages. All you do is speak what you want into the device – it then repeats it in English and translates it to the foreign language of your choice. It's great for learning a different language, but could really save your skin in a difficult situation where you need to communicate with somebody.



Google Translate

Price: Free

Google Translate is one of the handiest apps to have on your iPhone. It translates words you speak, or type, into the app. But the reason we love Google Translate is because it features one of our favourite App Store apps ever made:

Word Lens. With Word Lens you point the iPhone camera at a sign and watch it translated in front of your eyes.



Languages (by Sonico)

Price: £2.29

It's not the most jaw-dropping app in this collection, but Languages is a solid and dependable translation dictionary. It has 12 complete language dictionaries for all the major European languages. Languages stores all the dictionaries offline so you don't need a connection to access them; it also serves up common phrases for each language.

There are no in-app purchases, so you just need to pay



for the app and get all the languages outright. But be careful to get the right one - searching for the word 'languages' on the App Store throws up a lot of results, as you'd probably expect. Search for 'Languages Sonico', or click the link below.

Universal Translator

Price: £2.29

Universal Translator is the best app to get if you need to talk to somebody and neither of you knows the other's language.

It works with Google Chat (so you both need to have Google Chat), and supports more than 50 languages. All you need to do is send your text messages, which are then instantly converted and delivered.

SpeakText

Price: Free (in-app purchases)

If you have documents or web pages that need translation, then SpeakText is a handy app to have on your iPhone.

SayHi Translate

Price: £3.99

SayHi deserves (and gets) a lot of credit for providing accurate speech recognition. It combines language with dialect to deliver more accurate translation.

More advanced



language learners might favour this over Google Translate or iTranslate.

iPro Translate

Price: 79p

With iProTranslate you can translate text from one language to another and quickly share the message on Facebook or Twitter. It's great if you want to share messages with an international audience.



Voice Translate Pro

Price: £1.49

This is one of the most comprehensive voice translation apps on the market. Relentlessly



updated, Voice Translate Pro is the place to go if you're looking for live speech translation in a variety of different areas – particularly if relatively obscure languages are spoken in those areas.

MyLanguage Voice and Text Translator Pro

Price: £3.99

Professional translation goes beyond merely looking up phrases. MyLanguage Translator Pro offers advanced features such as Latin character translation, and handles more than 59 languages.

MyLanguage is supported by an active community, so it features impressively up-to-date information and is expanding all the time.

Pixter Document and Image Scanner OCR

Price: £2.29

This isn't a typical translator app. Instead it translates documents using OCR (optical character recognition). Use the iPhone's camera to snap a document, and Pixter Scanner OCR goes through the document, recognises the characters, transforms them into text and then translates it. If you have documents you need translating then Pixter Scanner OCR is the app to get.



iPad Air 2

We return to the Air after four months of heavy use

The iPad Air 2 is Apple's latest iPad tablet: its top-end, flagship tablet device. Launched in October 2014, it has an impressive battery of enhancements and new features. It's fast, it's thin and it's quite beautiful to look at.

We reviewed the iPad Air 2 when it launched, but it's impossible so soon after a product emerges to review its long-term user experience and the problems and benefits that will emerge after months of use. With this in mind, we've decided to take another look at Apple's slimline tablet.



Design and build quality

We'll begin our review by looking at the most tangible aspect of the tablet: its physical design, build quality and all-round robustness. How does the iPad Air 2's physical chassis compare to that of the famously slimline first-generation Air 1?

The answer is that the Air 2 takes the waif-like and renders it wafer-like.

In a year of near-everyday use, the original

Air never once struck us as too fat or too heavy, but Apple nevertheless sliced 6 percent off its weight and nearly 19 percent off its depth. The Air 2 is just 6.1mm thick (down from 7.5mm) and weighs 437g (for the Wi-Fi version) or 444g (with 3G) – that's down from 469g/478. You feel like you could slide the iPad 2 under someone's hotel room door now.

The iPad Air 2 is crazy-slim. And we mean that not entirely in a positive sense; shaving further millimetres off an already whisper-light chassis seems like an extravagance, and was presumably achieved at some cost – to battery size, certainly (but not, admittedly, to battery life – see dedicated section below), and potentially to physical robustness.

Being so thin, the iPad Air 2 feels more fragile than its predecessor, and a little (very cautious!) flexing showed that there is more give than on the iPad Air 1. We assumed that some strong-fingered publicity-seeker would manage to bend one on camera within weeks of launch, and sure enough, somebody called 'Marvin from Germany' – in a video that has since been set to private – did exactly that.

Then again, we've been using the Air 2 every day for more than four months and it hasn't bent, buckled or snapped, or indeed sustained any physical damage or noticeable wear and tear at all. And, of course, the fact that somebody who was trying their best to bend an iPad Air 2 managed to do so doesn't mean these devices are likely to bend or break by accident. We think the Air 2, while less physically robust than the iPad Air 1, is still robust enough for the average user to have no problems.



Aside from being slimmer, the physical design is otherwise very similar to the first Air. The back edges are rounded, and there's a brushed-metal effect across the back panel. The front edge has a sharp chamfer and a mirror finish, and looks very smart.

The headphone socket and power-off button remain on the top of the device (unlike on the iPhone 6-series handsets, which saw the power button moved round to the right-hand side), the volume buttons are still on the upper right (but they're fractionally further apart, and therefore easier to tell apart with a blind finger) and the SIM tray is still in the same spot at the lower-right.

But the microphone holes have moved (they're either side of the camera aperture now), the speaker grille along the bottom is now a single row of larger holes rather than a double row of smaller ones – these are stereo speakers, as far as we can tell, but audio quality remains a weak point, as we shall discuss later – and the mute/

orientation lock switch has disappeared entirely, for reasons that elude us.

Regular iPad reviewers can get blasé about this, so let's take a moment to reiterate a final key point before we finish this section. The iPad Air 2 is a beautiful object that has been crafted to the very highest of manufacturing standards.

Interface

The iPad Air 2 runs Apple's familiar iOS software, of course, and at present comes with iOS 8 - iOS 8.1.3, in fact - preinstalled. (The iPad Air 2 will also be compatible with iOS 9 when it comes out in 2015, and you'll be able to upgrade to iOS 9 for free if you wish; expect this to add a range of new features to the iPad's arsenal.)

As well as the various apps bundled with iOS 8, there are thousands of apps available on the Apple App Store for you to download. Here are the 10 best apps for your new iPad or iPhone to get you started.

We've written before about iOS 8 elsewhere, and won't repeat ourselves here, other than to broadly say that it's a highly optimised, user-friendly system that beginners find easy to grasp but offers a deep feature set for power users.



Our experience with the interface suggests that it's faster on the Air 2 than on the iPad Air 1 (one would always expect a brand-new device to run quicker than one bogged down with a year's worth of software, but in this case we had restored the iPad Air 2 from the iPad Air 1 backup to keep things as fair as possible). Flipping from screen to screen, and within apps, seems near-instantaneous. Part of this may be down to the highly responsive screen, however, which we will discuss next.

Display

In many respects the iPad Air 2 features the same screen that we saw in the iPad Air 1 (and, with some minor variations, in several previous iPads). It measures 9.7 inches (diagonally, corner to corner), and has a resolution of 2048x1536 and a pixel density of 264 pixels per inch. That's the standard iPad Retina pixel density, and very sharp to look at.

But there are a couple of differences from last season's screen. One is in terms of the iPad's overall design: by compressing everything into a smaller form, Apple found itself obliged to take out what it calls the 'air gaps' between different elements of the screen.

However accurate a description that is, it has translated into a screen that is firmer to the touch, and has, unlike the device as a whole, less flex.



(One of our very few dislikes when reviewing the iPad Air 1 was the way the display yielded to a finger tap a tiny but appreciable amount. That's gone now.)

The second is the addition of an anti-reflective coating. We were sceptical, but this turns out to be pretty great, darkening and minimising the distracting reflections that appear when using an iPad under electronic lighting. My own reflection with the screen switched off was darker (and bluer) and considerably easier to ignore, and strip lighting and other reflections were reduced across the board.

Finally, the screen appears to be more responsive to the touch. (Apple says it has improved touch tracking on the display. Swiping is “incredibly responsive”, and Apple also claims “more fluid responses” for finger painting.)

It's possible that the compressed design means that the touch-responsive elements are closer to the surface of the glass than before, creating the illusion that your fingers are touching and moving the visual elements displayed. Or this could be the effect of the more powerful processor and its superb graphical muscle. Either way, the Air 2 is a pleasure to use.

Processor

As we mentioned just now, the iPad Air 2 contains a new processor chip - or perhaps we should say a new version of a month-old processor chip. It's the A8X, a souped-up version of the A8 that made its first appearance in the iPhone 6 and iPhone 6 Plus the month before the iPad Air 2 appeared.

The A8X is the fastest chip ever included in an Apple mobile tablet, and absolute overkill for

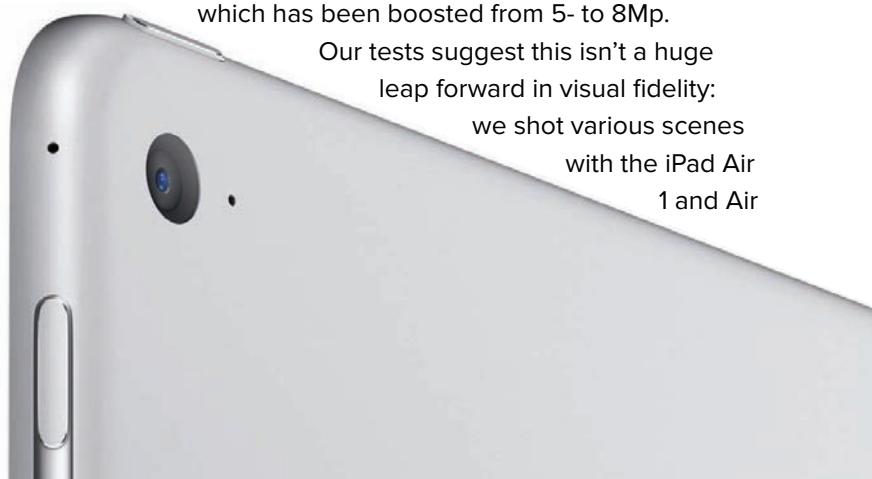
virtually all apps currently available, but it will prove its worth in the months and years to come. Developers are looking at the A8X processor right now and salivating at the possibilities it opens up. Cutting-edge games and photo- and video-editing apps released in 2015 will be designed to take advantage of the A8X's processing muscle, and you'll start observing appreciable speed gains when switching from iPad Air 1 to iPad Air 2.

The real-world difference in speed between the iPad Air 1 and iPad Air 2 is minor at best. We tried booting up some of our more demanding games – Space Hulk, for instance – and found that the iPad Air 2 got them running a second or two quicker. The camera is ready to shoot a little earlier, too. This is all nice enough, but more a sign of greater potential gains in future than a massive benefit right now.

Camera

The third in the iPad Air 2's trio of headline enhancements (after the slimmed-down body and pumped-up processor) is the rear-facing camera, which has been boosted from 5- to 8Mp.

Our tests suggest this isn't a huge leap forward in visual fidelity: we shot various scenes with the iPad Air 1 and Air



2, and while the latter generally showed more detail, there were some where it was hard to tell which was which. Your experience is likely to vary depending on the shooting conditions, and there will be areas where the iPad Air 2 demonstrates its superiority, but don't expect a quantum leap forward.

Our overall feeling is that there are certain shooting conditions in which the iPad Air 2 demonstrates its superiority – particularly close-up detail under studio lighting, and low-light conditions. More generic daylight shots were hard to tell apart.

More appealing than the increase of megapixel rating, however, may be the new camera features that have been added. The iPad Air 2 gets slow-mo and time-lapse video modes, as well as burst mode and a timer. And panoramas: the iPad Air 1 already had these, but they're now allowed to go all the way up to 43Mp.

Apple has also improved the FaceTime camera; it's now a FaceTime HD camera, the same as in the iPhone 6, and letting in 81 percent more light. Perfect for low-light use.

Talk of iPad photography always leads to discussion of whether people should be using their tablets as super-size cameras. But the evidence is in, and it shows that they don't care what you think, and are going to keep doing it anyway.

While some of us might laugh at tourists taking pictures with an iPad, and decry iPad photographers at concerts, iPad photography isn't going anywhere. As Apple put it, the iPad makes an excellent view finder, and we can admit to seeing the appeal (to a certain extent). Whatever your feelings about taking

photos with the iPad, there is no doubt that it is a popular camera.

For these reasons the iPad Air 2's improved capabilities as a camera will be much appreciated.

Touch ID and Apple Pay

Less important than the big three improvements, but likely to intensely please a select few Touch ID addicts, is the addition of Apple's fingerprint scanner to the iPad line for the first time.

Touch ID on the iPad is as straightforward and fast to use as it is on the iPhones. You can use Touch ID to unlock your iPad Air 2, to unlock various apps, and to verify purchases on the App Store. (There are checks and balances, however – the first time you unlock the iPad after a power-down, you'll need to input the passcode; ditto the first time you verify a purchase after setting up Touch ID.)

You can also use Touch ID to do your online shopping, as long as those sites and/or apps have Apple Pay implemented.

Apple appears to have concluded that people are unlikely to take their iPad shopping in the real world so the most famous aspect of Apple Pay and Touch

ID – the one where you
touch your device
on a sensor



in a shop to pay for goods, as seen in the iPhone 6 and Apple Watch – is disabled on the iPad Air 2.

We had thought that Apple had simply chosen not to equip the new iPads with the NFC antenna required for in-store Apple Pay, but a teardown by iFixit has found otherwise. Which means that, in theory, Apple could activate the feature in future. It's perhaps more plausible, however, that the NFC module has been included as a future-proofing feature that can be used for smart home controls, device-to-device money transfers and other as-yet unrevealed functions some way down the line.

Graphics

Another benefit of the A8X chip we looked at earlier is that it uses quad-core graphics; the A8 in the iPhone 6 or Plus doesn't.

Apple says the graphics are 2.5x faster than the iPad Air graphics were. Apple says that this iPad is capable of the kind of graphics "once possible only on desktop computers and gaming consoles".

At launch time Apple told us that games developers are working to optimise games for it. It has to be said that, even four months on, there still aren't all that many games we've seen that really



demand (or even convincingly exploit) the iPad Air 2's undoubted processing capabilities, but we remain optimistic that patience will be rewarded. While there is a significant portion of the iPad gamer market sitting on devices with older processors, the average game developer will want to play it safe: it makes sense to appeal to as large a market as possible. But those gamers on iPad 2, iPad 3 and iPad 4 devices will upgrade in time.

To test its potential power for gaming, we put the iPad Air 2 – along with all the other currently available iPads – through our usual graphical speed benchmarking test, GFXBench. As expected, the iPad Air 2 was streets ahead of the pack, recording a playable framerate of 24.6 frames per second (fps) on the exceptionally tough onscreen Manhattan portion of the test – on which the other devices (or rather, the other devices that were capable of completing it – the iPad mini 1 couldn't cope) were clustered around 9fps.

Speakers and sound quality

The iPad Air 2 gets a stereo speaker setup, like the iPad mini line-up before it. (At least, we're pretty sure it does - there's still some debate about this, and Apple's own specs only call them speakers.) About time, some audiophiles might say: yet the truth is that it might as well still be mono.

The iPad Air 2's stereo speaker grilles are right next to each other, on the same edge of the device. (The lower edge, either side of the Lightning port.) It's therefore almost impossible to create a situation in which the two sound sources can be heard

separately. If you pop the iPad on its side and watch a movie with amazing sound design, prepare for disappointment: both speakers will be on the left (or the right) of the screen, and their output will be mashed together.

We put our noses up against the Lightning port and were able to persuade (fool?) ourselves into thinking we were listening to music in glorious stereo. There was an audible separation between left and right channels. But this isn't the way any sane person listens to the content on their tablet.

To provide good stereo sound, the iPad needs to have speakers on opposite sides. Of course, this would involve compromises in design, and



it's perfectly possible that Apple doesn't think of the iPad as a serious audio device; and those who want stronger audio can always invest in a wireless speaker or some decent headphones.

Moving away from the mono/stereo issue (and it is frustrating to have stereo speakers but not be able to listen to them in a way that is conducive to stereo sound), the iPad Air 2 produces sound that isn't bad, but isn't great either. It can manage quite a decent volume without quality degrading, but while you get a nice solid snap out of snare drums and similar, bass isn't much to write home about. It's quite a 'thin' sound, too – not something you'd call warm.

If audio is a priority for you, it's worth thinking about a separate wireless speaker.

Battery life testing

Despite all the speed increases, and the fact that it comes with a lower-capacity battery unit (27.3Wh compared to 32.4Wh in the Air 1), Apple claims the iPad Air 2 offers the same 10-hour battery life as its predecessor. That's 10 hours of what is usually termed 'typical use', which in this case encompasses web browsing, video and music.

The Air 2 manages this feat because of the increased power efficiency of the A8X chip, the company says, as well as improvements to the efficiency of the battery itself.

Macworld technical editor Andrew Harrison put these claims to the test in our labs. We set the Air 2 a more stressful test than normal browsing, using looped gameplay from the GFXBench graphics test discussed above. Our established battery test

requires a device to play the GFXBench T-Rex sequence 30 times, which in this case gave an estimated total runtime of three hours, 53 minutes.

We stress here that this isn't the indictment of Apple's claims that it might sound like, because our battery test is far more strenuous than typical use - you'd never expect a device to record the same battery life here as in everyday use. For reference, we tried the same test on a year-old iPad Air 1 (with both tablets on the same build of the current latest iOS 8.1 software) and the first Air posted an estimated total runtime of four hours, six minutes.

But beyond this it's important to also look at the performance of each product. Over the length of the test, the iPad Air 1 could plough through gaming visuals at an average framerate of 22.9fps; meanwhile, the Air 2 played at more than twice that speed, recording 48.3fps.



Connectivity

The new iPad Air 2 also offers better Wi-Fi connectivity than the last generation, thanks to the inclusion of the latest 802.11ac technology. The iPad mini 3 doesn't gain this new Wi-Fi technology which seems like a strange omission as Apple told us that the new Wi-Fi technology will be great for AirDrop.

Another new area of connectivity is the addition of Apple's own SIM – a removable SIM for the UK and US markets. This SIM is designed to be "as flexible as possible", according to Apple. It will only work in the latest iPads, though.

Storage capacity

As it did with the iPhone 6 line up, Apple has dropped the 32GB capacity option from the iPad Air 2 line up. Apple told us that this was a strategy to bring the higher capacities down to a lower price point making it more affordable in that category.

When we asked why they kept the 16GB model on (rather than replacing that with the 32GB model) Apple told us that 16GB has always been popular (due to the lower price we are sure).

Price

Prices start from £399 for the 16GB Wi-Fi version, rising to £499 if you add cellular connectivity.

iPad & iPhone User's buying advice

After spending four months with Apple's flagship iPad, we are happy to report that it didn't have any problems standing up to everyday use. It really is a fantastic device.



Broken iPhone screen

Five fixes for repairing a cracked smartphone display

Apple

Apple will come to the rescue and repair your cracked screen, but it won't be free. If your iPhone is in otherwise good condition, you'll be handing over between £86-106 – but that's only if there's nothing else that deems it as an "out-of-warranty repair". If that is the case, the price jumps up to £236 for an iPhone 6. So, what other options are available?

High street retailers

The High street. The one stop shop for all your needs – including iPhone screen repairs. The High Street is where most people will go when they break their phone screen because generally speaking, people like the personal touch, which is something you tend not to get when using online repair services. Another point for the 'high street vs online' argument is if anything goes wrong with a high



street repair then you know where to go to complain (unlike most online services).

High street chain Timpsons has noticed the growing demand for a local repair service and have added screen repair services at 412 of their 1409 stores nationwide, starting at only £39.99. It's interesting to note that individual prices for each phone aren't available on the Timpsons website, which begs the question "how much is it for an iPhone 6 repair?" Over £100?

High street retailers are the obvious option – but are they the best? Using a high street retailer could be a risky process because when you leave the store, you don't know who's handling your iPhone or what they're doing to it.

People like to keep their private lives private – and what is at the centre of most people's lives? Smartphones. From email to texts to photos, our

digital world revolves primarily around smartphones. When you take your iPhone to a high street retailer, you're handing over your central hub, so to speak, and there's a small risk that your data could be browsed and even remotely stored. A lack of security regulation in smaller, independent shops could be risky, especially for businesses.

Replacement screen parts are fairly easy to come across and can be bought fairly cheaply online. The issue with this is that cheap screens and parts seem to have a tendency to break more often than official Apple parts. What does that result in? More trips to the shop to get it repaired and more money spent. If a High Street retailer charges as little as £40 to replace an iPhone 6 screen, you should start questioning how that's possible.

Online repair services

Another option to think about are online repairs services, such as MendMyi (mendmyi.com).

Online repair services are becoming ever more popular, with people becoming too busy to take their iPhone to a shop themselves. MendMyi have become a household name for UK iDevice repairs and customisation over the past few years – even customising Stephen Fry's iPhone with their Colour Lab service.

With MendMyi being a primarily online service, you have to rely on the postal service to send and receive your precious iPhone. The real question is – how safe is it? People are often wary about sending their phone off in the post to a company that they've found online. What if it breaks? MendMyi

offer an additional 'Express Pickup' service that insures your iPhone in transit. MendMyi is active on social media and you can chat to the guys on Twitter before sending your phone off, or alternatively drop it to one of their branches in Haverhill, Cambridge or Sudbury.

MendMyi only use official Apple parts in the repair so you can be sure that your screen replacement is genuine. They also run a diagnostics test on your phone while it's being repaired to make sure there's nothing else wrong with it – a great extra that you won't find in many phone repair services.

So, what's the down side? When it comes to pricing, MendMyi aren't the cheapest – while an iPhone 5s screen repair costs a reasonable £87, an iPhone 6 screen repair jumps up to £287. While that may be more expensive than competitors, MendMyi

aim to have your phone diagnosed & repaired within one- to three days and it is couriered back to you shortly afterwards.

Another online repair and customisation service to think about is iSmash, based in London. Similarly to MendMyi, you can select the repairs you need on their website along with your choice of postage, whether it be them sending you a “Post in Pack” for £5.99 or you directly organising a courier. Their pricing is also similar, with an iPhone 5S screen repair costing slightly more than MendMyi at £99. Interestingly, iSmash only charge £145 for an iPhone 6 screen repair – almost half the price of the same service at MendMyi.

One advantage that iSmash has is that they have walk in shops open all around London – Kings Road, High Street Kensington, Canary Wharf and Victoria Station. That means that you can book an appointment, take your iPhone into store and get it repaired on the same day.

Home repairs

Some people can't wait for days for their iPhone screen to be fixed. What alternatives are there? Depending on your location, there are companies that can come to you and repair your phone. One such company is Phone Dudes (phonedudes.co.uk) – it will come to you anywhere within Zone 1 of London and repair your broken iPhone screen, be it at work, home or even Starbucks.

You set the time and date that the engineer comes to you too – no waiting around all day like you do when waiting for a delivery. Amazingly,



A New Era of Smartphone Screen Repair

As seen in **Macworld**

The Phone Dudes come to wherever you are in Central London and repair your cracked Samsung or iPhone screen.

IPHONES FROM £69 SAMSUNG'S FROM £99

SEND ME A DUDE ➔

Download icon

Phone Dudes claim that once the engineer arrives, your iPhone will be ready to use again within just 10 minutes. That means that you don't have to be away from your iPhone for too long and it destroys any issues with phone security – the repair is done in front of you, so you can see exactly what is happening.

Phone Dudes have a Twitter account where they can answer any questions that you have about the service. It's also where you can find feedback from customers, with many commenting about how they've booked an appointment in the morning and had it repaired by the afternoon of the same day.

As with MendMyi, Phone Dudes also use official Apple parts and repairs range from a more modest £69 to £120 for iPhone 4- to 6. However, it's worth noting that there's currently no official support for the 6 Plus.

DIY repairs

If your screen damage is more cosmetic than anything, there are other DIY options available. With the Internet being the internet, there are a variety of home remedies for scratches (not cracks) on your screen. Other options include car scratch removal creams, such as the 3M Scratch and Swirl remover that apparently works wonders on a scratched screen. Make sure that all ports are sealed before attempting to use creams, as you don't want to add liquid damage to your list of problems.

There's one more option – but it's not for the faint-hearted. iFixit (ifixit.com) is an online service that provides tutorials on how to repair any part of any iPhone. They give clear and easy to follow steps with high-resolution images highlighting exactly what you need to do. They're also a one stop shop – once you've found the tutorial you need, you can buy all the parts directly from them, negating the risk of you buying the wrong parts.

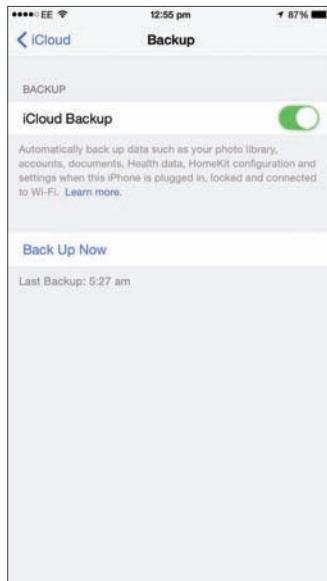


Transfer contacts

Move old contacts to a new iPhone

Sync iPhone contacts to iCloud

On your old phone, make sure that you're logged into your iCloud account and connected to Wi-Fi. To check if you're logged in, head to *Settings* → *iCloud* – if your name and Apple ID are displayed at the top of the page then you're logged in and ready to get started. Once you're logged in, make sure that the option to sync contacts is toggled on. Go to *Settings* → *iCloud* → *Storage & Backup* and tap 'Back Up now'. The length of time this takes depends on how much content you're backing up and the speed of your Internet connection.



Transferring contacts to a new iPhone

During the initial setup of your iPhone, you'll be prompted for your Apple ID details. When asked to choose from a backup or set up as a new iPhone, select 'Restore from iCloud Backup'. Select the latest backup from the list and the restore will begin. The length of time this takes depends on your internet connection. Once the restore has finished, the phone will restart and should be ready to use.

I've completed the initial setup.**How do I restore to my backup?**

If you've already gone through the initial setup without restoring from a backup, all is not lost. Head to *Settings* → *General* → *Reset* → *Erase All Content and Settings*. Only do this once you have backed up your old phone via iCloud. Follow Step 2.

Backup via iTunes

Plug in your old iPhone in to your Mac or PC and run the latest version of iTunes – window will open. On the left-hand side, click *Info* and make sure that contact syncing is enabled. Return to the Summary page, click *Back Up Now* and allow your iPhone to back up. Once your iPhone has backed up, unplug it.

Retrieve an old backup on a new iPhone

Go through Setup Assistant on your new iPhone and when you're prompted to select your backup, select *Restore from iTunes Backup*. Connect your new iPhone to the same Mac or PC that you backed up your old iPhone on and open iTunes. iTunes will ask you if you want to restore from a backup or set up as new – select the backup of your old device and click *Continue*. Once the Restore finishes, your new iPhone should be ready for you to use.

Side note: If you've already set up your new iPhone, you can reset it so you can go through the iOS Setup Assistant again and restore from the latest backup of your old iPhone. To do this, go to *Settings* → *General* → *Reset* → *Erase All Content and Settings*. Only do this once you have a backup from your old phone.



Apple Pay

Complete guide to Apple's mobile payment system

At its iPhone 6/6 Plus launch event last September, Apple also debuted what it called "an entirely new category of service" – a mobile payments system called Apple Pay.

It's designed to let you pay for things with your iPhone (or Apple Watch or iPad, in slightly different and more limited ways).

How Apple Pay works

Your Touch ID fingerprint scanner is key to the whole thing, but you will also need a specific NFC antenna that is built into certain Apple devices.

If a shop supports Apple Pay, it will have a little sensor by the till. You put your iPhone on the sensor,

put your finger on the Touch ID fingerprint scanner to identify yourself, and that's it.

The underlying technology is NFC (Near Field Communication), a standard that Android phones have used for mobile payments for some time.

Google Wallet is based on NFC. Indeed, NFC has been around since the late 1990s, appearing in key fobs, building passes, Oyster cards and similar.

There are NFC antennas in the iPhone 6 and 6 Plus, but not in any earlier models. There are also NFC chips in the iPad Air 2 and mini 3, though, they appear to be deactivated for the time being. No iPad is able to use the full, in-store version of Apple Pay. And we shouldn't forget the Apple Watch – for details see page 14.

Using Apple Pay

Here at *iPad & iPhone User* we've not tried Apple Pay yet, since it hasn't launched outside the US. But reporters for our American colleagues at *Macworld US* have tried it out, and they've reported extensively on the customer experience.

"I didn't experience any cashier confusion or glitches when I used Apple Pay, except when I tried to buy pumpkin-shaped Snickers at Rite Aid," writes one of our US colleagues. It's another world over there, isn't it?

More seriously, the writers found the service broadly user-friendly and easy to master. "It's secure, easy to use and quick," they observe. "Rummaging through your bag or pocket for your phone takes considerably less time than digging for your wallet and then fumbling through until you find your card."



But there were some problems, at that early stage in Apple Pay's US adoption, getting shop workers to grasp the way the system works. Processing refunds proved to be particularly tricky.

"Since Apple Pay randomises the card number for merchants and prints out that fake card number on the receipt, I had a feeling that returns would be problematic, even though Apple insists it wouldn't be. As it turns out, I was right... and I was wrong," writes Leah Yamshon.

"There was a brief hiccup at American Eagle, when the cashier asked if he could see my credit card to confirm that the last four digits matched what was on my receipt (just like my old store). I explained that I had used Apple Pay, and that the receipt wouldn't match my card because of the system's security measures. Stumped, the associate called his manager over, and we filled her in what was going

on. The manager told me that she still needed to see my actual credit card to make the return, explaining that I couldn't get a refund without swiping the card. It was a learning experience for both of us."

Yamshon wisely predicts that hiccups of this sort are sure to ease as Apple Pay becomes more widely understood. We should therefore brace ourselves for difficulties in the early months after Apple Pay launches in the UK, but at the same time be reassured that they won't last forever.

Setting up Apple Pay

This is simplicity itself. Take a picture of your credit card, verify that this is your card, and you're ready to go. Your credit card (but not its sensitive data) will then be saved in Passbook; the new red symbol along the top of the Passbook icon in iOS 8 represents credit cards.

How refunds and returns work

As our colleagues describe in their hands-on review above, there's likely to be some confusion about processing refunds and returns, and for the first few months after Apple Pay launches in the UK you may find yourself guiding the shop assistant as much as they do you.

But it shouldn't be too hard in practice. Apple explains: "Use the Device Account Number to find the purchase and process the return, just like you would with a traditional credit or debit card payment. To see the last four or five digits of the Device Account Number, ask the customer to go to Passbook, tap the card, and tap 'i' on the lower-

right corner of the display. You can also have the customer hold their iPhone 6 or iPhone 6 Plus near the reader, select the card they used to make the original payment, and authorize the return with Touch ID or passcode."

In other words, it should be as simple as touching your iPhone to the reader, but we'll see how it works out 'on the street'.

Can I use Apple Pay online?

Yes. Apple called this "one-touch checkout", since there's far less need to enter data than in most online payment systems.

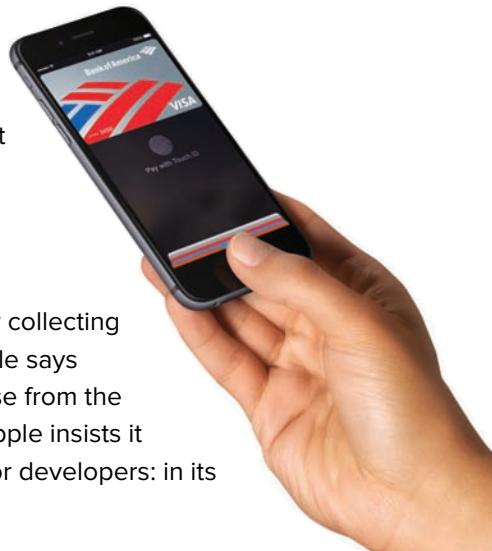
Can I use Apple Pay in non-Apple apps?

Absolutely – the more the merrier, as far as Apple's concerned. A wide range of e-commerce apps work with Apple Pay, including Apple Store, Uber (the taxi app that caused so much furore among London cabbies), Disney, Groupon, and OpenTable apps.

But, in keeping with its recent open approach to developers, Apple is making overtures to encourage more apps to be built to support Apple Pay.

How Apple makes money out of Apple Pay

The good news is that it's not by collecting purchase or customer data. Apple says it will levy a fee on each purchase from the banks involved in the system. Apple insists it won't charge users, merchants or developers: in its



new Apple Pay FAQs, the company confirms that it “doesn’t charge any additional fees” for merchants to accept Apple Pay.

Is Apple Pay secure?

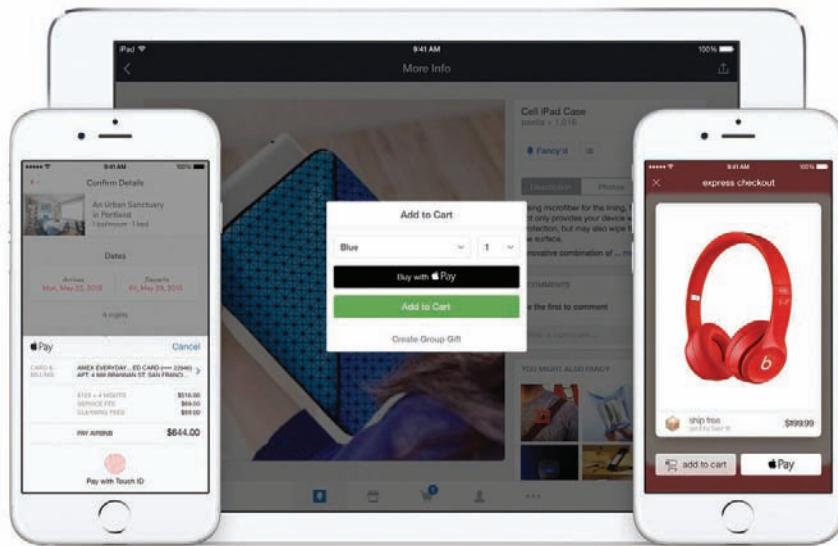
Good question. The short answer is yes, we’re pretty sure it is – and it’s almost certainly more secure than previous payment methods. But the long answer is a bit more complicated.

It’s impossible to say with any certainty that Apple Pay’s security is watertight until we’ve tested it out for ourselves over a decent period of time. But Apple execs have fallen over themselves to insist that security was a priority from day one.

If the iPhone is lost or stolen, for instance, you can use Find My iPhone to suspend all payments from that device. There’s no need to cancel the credit card, because the number isn’t stored on the device, as we already mentioned – we can thank tokenisation for that.

Your credit card number isn’t given to the merchant. What you’re doing, rather, is creating a device-only account number and storing it in the secure element. “You use a one-time payment number and a dynamic security code,” said Eddie Cue, Apple’s senior vice president of Internet Software and Services.

The secure element is a hardware component - a chip inside the iPhone 6 and iPhone 6 Plus where sensitive data can be stored. Secure element is a generic term for protected memory on smart cards, and the data on the secure element isn’t even accessible to iOS (it’s only accessed via a random



code during the transaction). Hackers wouldn't be able to get hold of your credit card details if they hacked your phone. And it's apparently able to sense if someone is dismantling the phone in an attempt to access the data on the secure element.

It's also worth mentioning that Apple has a strong record when it comes to payment systems. Even the biggest payment platforms suffer compromises from time to time, but Apple has built up customer trust when purchasing through iTunes and the App Stores.

Apple hasn't been immune from security problems, admittedly, with the nude celebrity photo leak from iCloud recently put at its door. (The company did claim that this was the result of a targeted attack on password and usernames, mind you, rather than a failure of iCloud's security

systems.) But even if some pundits felt its initial response to the leak was lacklustre (or even victim-blaming), it then responded by insisting that security will be beefed up in iOS 8: pushing two-factor authentication and sending additional security warnings.

Apple is taking security seriously.

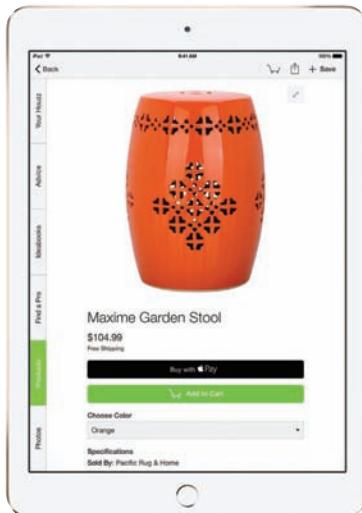
Incidentally, Tim Cook pointed out that the system Apple Pay is proposing to replace isn't exactly super-secure itself, since it's easy to lose a credit card or have it compromised.

"This whole process is based on this little piece of plastic," he said. "And whether it's a credit or debit card, we're totally reliant on the exposed numbers and the outdated and vulnerable magnetic strip. Which, by the way, is five decades old. And the security codes, which aren't that secure."

Could a hacker steal credit-card details from an iPhone?

As a security measure, the credit card details aren't actually stored on the iPhone, or on Apple's servers. (It may be worth mentioning that Google Wallet works differently: Google keeps your card details on its servers.)

Apple says the payment network or issuing bank will provide a Device Account Number, using a technique called tokenisation: replacing a sensitive piece of data with a random piece of data that



typically has the same format. Tokenisation reduces or removes the need to update existing systems that require a credit-card number, without exposing the real number to theft.

But here's one last word on security. One site reckons that Apple Pay and other electronic wallet technologies are actually making it easy to commit credit-card fraud. It reports that criminals are bypassing the security checks by using the old-fashioned fraud method – buying hacked credit-card details – and then setting these up on an iPhone's Apple Pay system, which then allows them to pay for goods without any identification checks beyond the fingerprint – which won't be a problem, because it's the fraudster's phone, even though it's not his credit card. Obviously this is hardly Apple's fault, nor is it really a new problem – it simply makes the fraud process slightly smoother for criminals who have already got their victim's credit-card details. Read more details for yourself [here](#).

If I'm hit by fraud on Apple Pay, will I be liable for any losses?

The situation should remain much the same as when using credit or debit cards on their own. In its guide for merchants, Apple explains about fraud liability:

“Apple Pay transactions are treated in the same way as your current credit and debit transactions. You'll have the same liability rules applied to Apple Pay transactions.”

Regulations in the UK dictate that cardholders are not held financially liable for any fraud on their cards, “provided you have not acted fraudulently or without

reasonable care (for example, you haven't written down your PIN and haven't disclosed it to someone else)", and this will apply under Apple Pay too.

Payments made using Apple Pay in a shop are classified as card-present transactions, by the way. Payments made using Apple Pay within apps are card-not-present transactions. This has some ramifications in terms of liability if something goes wrong, but either way it shouldn't be you picking up the tab.

Are you tracked when you use Apple Pay?

Reportedly not. Eddie Cue insisted: "Security is at the core of Apple Pay; but so is privacy. We are not in the business of collecting your data." (Was that a shot at Google?)

When you go to a shop, Apple doesn't get to know what you bought, how much you paid for it, or any other personal details. The guy behind the counter doesn't get to see your name or your credit card number - all of which are potential weak spots of the current system, under which cards are occasionally cloned and ripped off.

Which companies support Apple Pay?

Eddie Cue said that there are 220,000 contactless payment points where you'll be able to use Apple Pay, and that Apple is working with large retailers including Macy's, Bloomingdales, Walgreens, McDonalds, Disney Stores, Nike and Toys R Us. And you can use Apple Pay in Apple Stores, of course.

While Apple Pay didn't get its UK launch at the Apple Watch event (as we had hoped), Tim Cook did

Use Apple Pay in these apps.



offer some facts and figures to let us know how the service is getting on; and one of the more interesting titbits was the fact that Coke is now offering Apple Pay-compatible vending machines. (Not just a few to demonstrate the concept, either – there are currently 40,000 of them, and this is predicted to rise to 100,000 within the year.) No more flattening crinkled dollar bills, Cook said.

Oh, and here's one more – although it can't really be described as 'bricks and mortar'. The US airline JetBlue has announced that passengers can use Apple Pay to buy drinks and other onboard items on some of its flights. Could be convenient for those who find it difficult to dig their wallets out while confined to a cramped economy-class seat.

This isn't terribly exciting news for us here in the UK, because JetBlue serves only destinations across

the Americas. But the way these things tend to work in air travel is by a process of peer pressure: if one airline is offering a new gimmick then the others often feel the need to follow suit. So who knows: an airline with European connections may adopt the service in the near future.

Which banks support Apple Pay?

Apple Pay launched with support from credit and debit cards from American Express, Mastercard and Visa and, Apple said, the six biggest issuing banks in the country. We're not totally sure what issuing banks are, to be honest, but here's what Wikipedia has to say on the subject.

The list of Apple Pay-supporting banks includes JPMorgan Chase, Bank of America and Citigroup, but we understand that Apple has set up partnerships with enough banks to cover most credit cards in the US. Coverage is likely to be less comprehensive outside the US, at least at first, but Apple obviously has considerable influence.

When will Apple Pay launch in the UK?

We expect Apple Pay to launch in the UK in the next few months, although we've yet to hear official confirmation. Hopefully that's about to change.

There are various clues that point to an imminent UK (and European) launch for Apple Pay. Visa, for one, has said it's working with Apple to bring Apple Pay to Europe in 2015. And Visa Europe has announced a new tokenisation system that it will offer to European financial institutions from April, leading to speculation that this will pave the way for



Apple Pay adoption. See more on that story here: [Why Visa's latest move in Europe signals Apple Pay is on the way and Visa Europe security updates may set the stage for Apple Pay expansion.](#)

We suspect, by the way, that the UK could well get Apple Pay earlier than (or at the very least at the same time as) the rest of Europe – a prediction based partly on the financial superhub that is London, but also on a mysterious Apple job listing that was briefly made public before disappearing.

Thanks to the brief posting of an Apple job application (which has since been taken down), we know that the company is putting together a London-based Apple Pay team to prepare for the launch of Apple Pay in the UK, as well as across the whole of Europe, the Middle East, India and

Africa (or EMEA). This is why we think a European rollout of Apple Pay is close, and why we think the UK is central to Apple's plans for the service outside the US.

The application read: "The new London-based Apple Pay team will work to drive the roll-out of this technology across EMEA by working with a variety of internal and external partners, including teams in the US where the product will first launch and the EMEA organisation, as well as Issuers, payment networks and merchants across Europe.

"To accompany us on this journey we are looking for a highly enthusiastic and energetic support intern to help us drive our business development activities, specifically to support execution of multiple NDAs and contracts with third party partners."

Another thing that may affect the European rollout of Apple Pay is a new set of regulations currently being considered by EU legislators.

The presidency of the European Union Council of Ministers has recommended new rules for mobile payments. These would stipulate "strong customer authentication" and require payment service providers to apply for a licence to operate in each EU member state individually.

In some ways these regulations (which are only planned at this point) sound like they might favour Apple, whose service incorporates strong security and biometric identification. But a new and more arduous licensing process could add delays to Apple Pay's arrival in the UK and the rest of Europe.

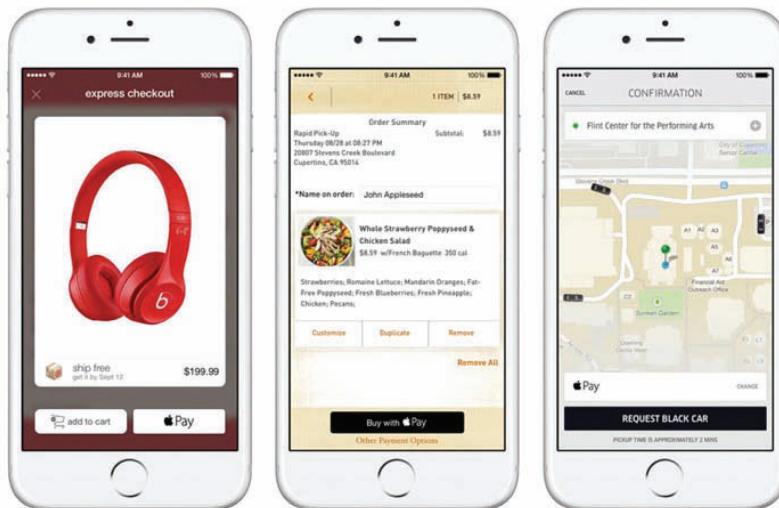
One interesting aspect in all this jumps out at us. The Payment Services Directive specifies that

payment service providers apply for a licence in their 'home' state, and then that home state gets to decide (with some limits and exceptions) whether the provider can acquire further licences to expand its service into further EU states.

Apple is obviously a US-based company, but its European HQ is in London. Does this mean the UK will get Apple Pay ahead of the rest of the continent?

According to V3, the company has not yet confirmed a date for the European rollout of Apple Pay, but Pedro Sousa, head of contactless and mobile payment for Visa, said the service will reach Europe in 2015. So that's something.

In any case, those banks and almost all of the companies mentioned above are international operations, and it should be relatively easy to bring Apple Pay across the pond if it proves successful in the US. Eddie Cue said Apple is



“working hard to bring it to even more countries”.

(“Even more”? Even more than one? Hmm.)

AppleInsider reports that a deal has been struck to bring Apple Pay to China, too.

Rival services

As usual when discussing Apple rivals, two names leap to mind: Google and Samsung. There are a few other services out there, but we'll deal with those two first.

Google Wallet first. This has been around for a few years now, but it's a little different to Apple Pay. For one thing, it lets you store debit and credit card details on your mobile, whereas Apple Pay uses tokenisation to ensure that the details aren't stored on the iPhone. (There has been some criticism of Google Wallet's security, but it should be pointed out that the company has implemented security measures including the storing of the details in the NFC chip's secure element.) And Google Wallet offers wider compatibility than Apple Pay. See: [What you need to know about Google Wallet](#).

By the way, Google Wallet still hasn't launched in the UK, and our colleagues on *PC Advisor* don't think it will in the foreseeable future.

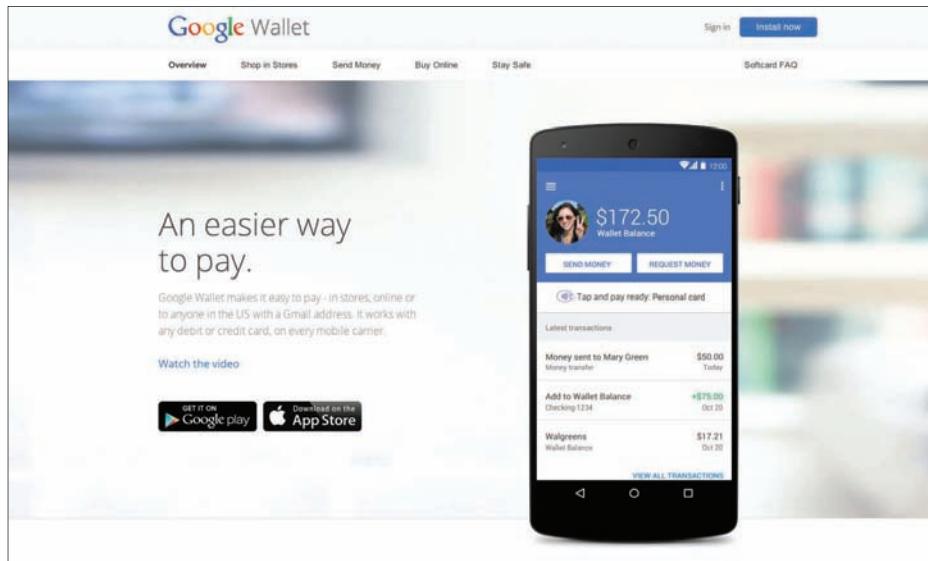
Samsung Wallet, by contrast, hasn't launched at all yet, but should arrive in April or soon after. This service more closely matches Apple Pay (cynics might accuse Samsung of copycat behaviour, but it acquired its way into the mobile payment arena) and should offer similar security and ease of use.

What other mobile payments services are there? There's CurrentC, whose prospects a colleague

discusses here: The Macalope: Which is doomed, Apple Pay or CurrentC? And Amazon had an app called Wallet that ran in beta for a while, but that appears to have been shelved now.

We think Google Wallet is the main challenger in this department (in fact, given how long it's been around, we should probably say that Apple Pay is the challenger to Google Wallet). But the thing about mobile payments is that competition will be good for all the participants, at least until it becomes mainstream.

Adverts by each of the services, and seeing other people use them, will combine to increase general awareness that paying in shops with your mobile is something that we do now, and help to ease worries about security, and feelings of embarrassment about being a show-off.



The image shows the Google Wallet website on the left and a smartphone displaying the Google Wallet app on the right. The website features a header with 'Google Wallet' and navigation links for 'Overview', 'Shop in Stores', 'Send Money', 'Buy Online', 'Stay Safe', and 'Softcard FAQ'. Below this is a large image of a smartphone with the Google Wallet app open. The app's interface includes a profile picture, a balance of '\$172.50', and buttons for 'SEND MONEY' and 'REQUEST MONEY'. It also shows a 'Tap and pay ready: Personal card' message. The 'Latest transactions' section lists: 'Money sent to Mary Green' (Money transfer, \$50.00, Today), 'Add to Wallet Balance' (Checking 1234, +\$75.00, Oct 20), and 'Walgreens' (Wallet balance, \$17.21, Oct 20). At the bottom of the app screen is a link 'VIEW ALL TRANSACTIONS'.



iOS Office

Get Word, Excel and PowerPoint on an iOS device

Towards the end of 2014 Microsoft announced that a new version of Office for Mac will arrive in the second half of 2015. At the same time it also updated the versions of its Office apps for iPad and iPhone, and made them available for free.

This means that both iPad and iPhone users can access and edit Word, Excel and PowerPoint documents on their iPhones as well as their iPads, as there is no longer any need to have a Office 365 subscription to access the editing features.

This is a big improvement: when Microsoft first unveiled versions of its Office apps for Mac and iOS devices these apps were limited, with the iPad version offering some editing features, but only

to Office 365 subscribers, and the iPhone version read-only. However, with the November update the updated apps are now free and can be edited without having a Microsoft Office 365 account.

Specs

The Office apps are available for all iOS devices capable running iOS 7 or higher. Android tablets merely get a new preview version of the Office apps unless the user subscribes to Office 365.

Get Microsoft Office apps on the iPhone and iPad for free

Microsoft Word, Excel and PowerPoint for iPad and iPhone are free to download from the iTunes App Store and the office apps are available to any iPhone or iPad user running iOS 7 or iOS 8. Visit the App Store on an iPad or iPhone and search for Word, PowerPoint or Excel - you want the versions with Microsoft Corporation listed as the developer.

You can use edit and view documents and spreadsheets in these apps for free, but to do so you will need a Microsoft ID. After you have downloaded the app you will see a screen asking you to log on to Office 365. If you don't have an Office 365 account, you can create a Microsoft ID and use that. The form isn't overly complicated, though Microsoft does require a birth date and telephone number (we always lie about our phone number). Don't worry, you won't be signed up to Office 365 and you can opt out of receiving marketing material.

You will need to register for an account if you want to be able to edit documents. If all you want to

do is read documents you can just tap Sign In Later and then View for Free.

Should you subscribe to Office 365?

If you have a subscription to Office 365 you will gain a few additional features that aren't available to other users including advanced change tracking features, no limits on the ways you can use paragraph styles, and advanced chart, table, and picture formatting tools. And if you're planning on using OneDrive for business documents, you will be required to purchase an Office 365 account. Users can also open existing documents stored on their OneDrive or any other SharePoint location.

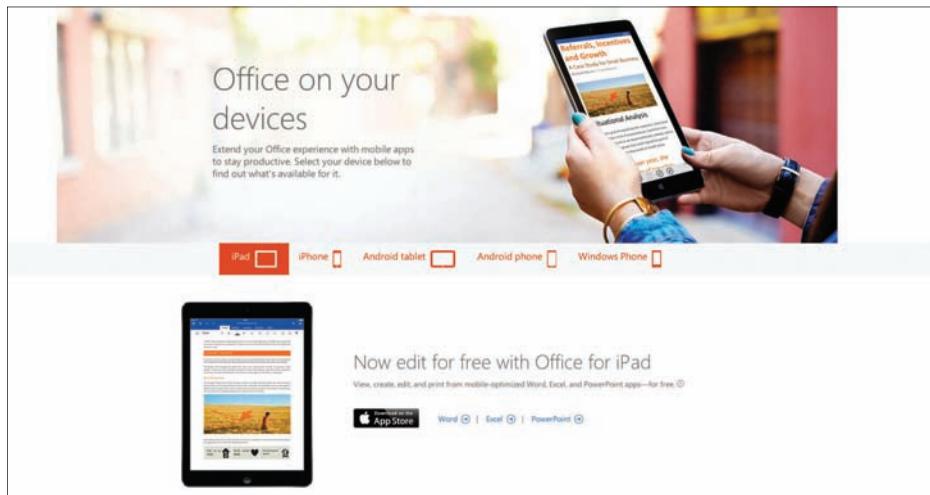
Depending on the subscription you might get the Office apps for your Mac too. You also get 60 minutes of free Skype calls each month, and 20GB of SkyDrive cloud storage for each of up to five users.

Given that this is a yearly or monthly subscription, over the next few years you may end up paying more than you would have if you are currently running an ancient version of Office for Mac.

Apple on the other hand offers its suite of iWork apps for free on new iOS devices (and as a free update if you already own them).

Office 365 pricing

For business users, an Office 365 subscription is available in a number of different packages. Small Business can sign up for £3.30 a month (£39.60 a year) but they won't gain the desktop versions of the apps. The Small Business Premium package costs £8.40 a month (£100.80 a year, 25 users, including



Office on your devices

Extend your Office experience with mobile apps to stay productive. Select your device below to find out what's available for it.

iPad  iPhone  Android tablet  Android phone  Windows Phone 

Now edit for free with Office for iPad

View, create, edit, and print from mobile-optimized Word, Excel, and PowerPoint apps—for free. 

Word  | Excel  | PowerPoint 

desktop versions). Mid-size Business can sign up for 9.80 a month (300 users, including desktop versions and Active Directory). There are also enterprise offerings for £2.60, £5.20 and £15 a month.

Home users can sign up for Office 365 Home Premium subscription at £7.99 per month or £79.99 a year and get access to the features, including being able to create and edit documents, as well as desktop versions of the Office apps.

Syncing options

Office for iOS integrates with a user's SkyDrive account, so users can create a document in the Office and then revise it on their iPad while commuting. The document will maintain its formatting even if the mobile version doesn't support that particular feature.

The documents you have stored in OneDrive must be downloaded to your iPad before you

can work on them. They are synced dynamically to the Microsoft Cloud at intervals. You can create and save documents on your iPad without saving them to OneDrive, handy if you are offline. However, it appears that it's not possible to move documents from OneDrive to your iPad if you want to work offline.

You can collaborate on documents, editing them at the same time as colleagues – you need to tap a share button in the upper left of the toolbar to invite others to access the document. Note that it doesn't update in real-time though, so you may refresh and find a paragraph you were working on has moved.

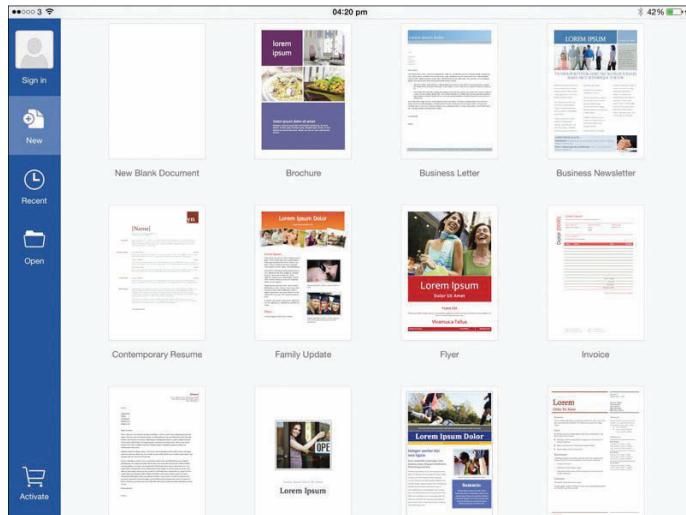
Apple has its own office suite, called iWork. iWork is available for free with the purchase of an Apple iPad or iPhone, and it is also a free update to the previous version of iWork if you own them.

You can collaborate on documents, editing them at the same time as colleagues – you need to tap a share button in the upper left of the toolbar to invite others to access the document. Note that it doesn't update in real-time though, so you may refresh and find a paragraph you were working on has moved.

Word for iPad and iPhone

With Word for iOS you get substantial document creation and editing tools – as with the other iOS Office apps, you can now edit documents in the app regardless of whether you have a paid Office 365 account. Previously, without an Office 365 subscription, you had read-only access to docs.

Presuming that you only work with standard text formatting, including selecting and changing a



document's paragraph formatting or adding and making basic changes to tables, the free version will work perfectly for you.

Using Word for iOS on the iPhone suffers from the limitations of the screen size, but Microsoft has made some tweaks to the interface to make it easier to use on the iPhone, for example, streamlining the 'Ribbon' (the toolbar you're used to using in every Office application) to maximise screen space while editing text.

There's also a 'Reflow' button that resizes the text, wipes away unnecessary document elements, and floats tools above the text. This allows you to focus on the text you're editing.

If you work in a business environment you may find that there are some limitations. The features that require an Office 365 subscription include some of the more in-depth layout and formatting

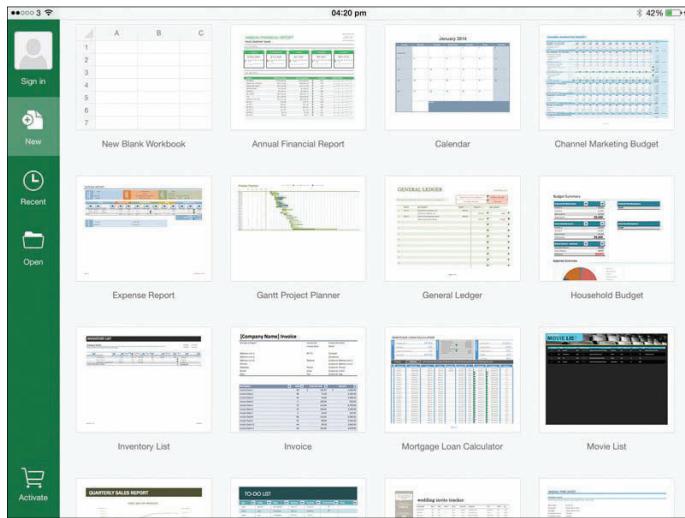
tools, page orientation changes, additions or reductions to columns and page sections, Word Art, custom text colours, adding reflections or other image editing options, advanced table and chart editing, and change tracking. Note that change tracking is already turned on for a document, any changes you make will be tracked, even if you don't have all the features of a subscription account – you can't accept or reject changes.

If you are likely to be accessing files stored in OneDrive or Dropbox for Business accounts, or on your own private Microsoft SharePoint, you'll have to have a paid account. If you sign up for a free OneDrive account you can use the app for storing and accessing documents. Luckily Microsoft has added Dropbox integration, which means you're able to add your Dropbox account to Word and open any Word documents you have stored there. You also get the option to simultaneously edit documents with others, with files stored in OneDrive or in your Dropbox able to be opened and edited at the same time.

Excel for iPad and iPhone

Excel for iOS can now be used to create spreadsheets, as long as you register for a Microsoft ID. Once you have logged into your account you will have almost all the features that Office 365 subscribers have. Creating, modifying, saving, and printing, all worked well in the free version.

There is also Dropbox support, so you don't need to use Microsoft OneDrive. Once you have logged in to your Dropbox account, you will see a list of Places



you can save and open things. You can then open, modify, and save any spreadsheets in Dropbox. We'd like to see iCloud Drive here too.

The features only open to Office 365 users include: customising pivot table styles and layouts (you can't create pivot tables in Excel for iOS anyway); add custom colours to shapes; insert and edit WordArt; add shadows and reflection styles to pictures; and add or modify chart elements.

Premium features are available with a Office 365 Personal account (one computer, one tablet, one phone) for £5.99 per month, or Office 365 Home (up to five of each device type) for £7.99 per month. You'll also get one terabyte of OneDrive storage, which can be used both in Excel and as a general cloud storage drive. Unless you're creating and editing graphs in Excel for iOS, you'll probably find that the free version meets your needs.

There is no difference between the iPad and iPhone app – but we have to admit that using Excel on the iPad is a much better experience due to the bigger screen. The iPhone screen really is too small for all but the most basic of editing. We'd use it in an emergency, but if we were crafting a document or making significant edits we'd be reaching for the iPad.

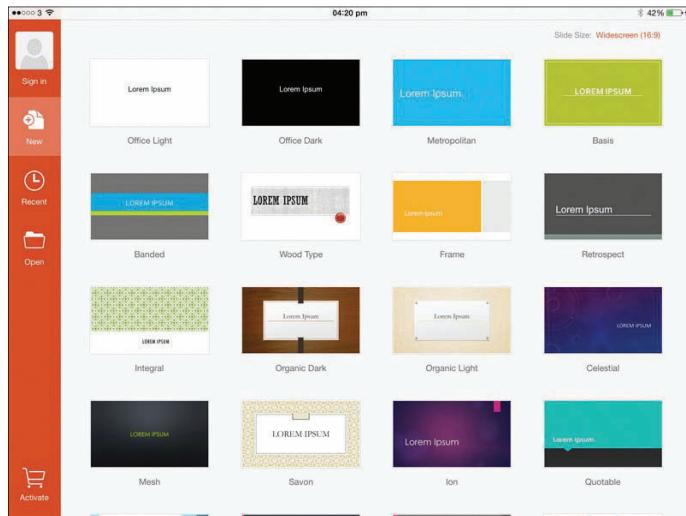
For example, there's no room for the ribbon on the iPhone's screen; to call up the ribbon, you have to tap the Edit icon, which opens an edit area that takes up about a third of the screen, and then tap another pop-up to select, for instance, Formulas, and then scroll through the formula browser. On the iPad, the ribbon is always visible, and choosing a ribbon item only loses one line of the display.

As well as creating and editing spreadsheets you can also print. This feature works well and was introduced prior to the November update.

There are still a few things you can't do in Excel for iOS, you can see and delete comments but not create or edit them; you can't name cells or ranges, create conditional formatting rules, or enter array formulas. You also can't insert images from OneDrive (or Dropbox) either, only from the iOS device's photos. And Excel is a one-thing-at-a-time app – that means if you're working with two or more spreadsheets, you will have to fully close one to open the other one.

PowerPoint for iPad and iPhone

Just like Word and Excel for iOS, PowerPoint no longer requires a subscription to edit presentations.



There are a few other improvements on the previous version: you can add and edit animations; can crop images; and use a Presenter View; audio and video now play correctly; and you can add video (though not standalone audio) from your iOS device.

If you have an Office 365 subscription you get access to premium features including Presenter View; adding custom colours to shapes; adding and editing WordArt; applying reflections and shadows to graphics; adding and editing chart elements; and adjusting the shading of table cells, rows, and columns. It's no match for the desktop version of PowerPoint. For example, you have limited control over transitions; and you can't create new themes, add SmartArt, or see your slides in Outline view. On an iPad, you can see comments added on a Mac or PC, but not edit them or add new comments; comments are entirely absent on the iPhone.



iTunes can't see iOS device

What to do when a Mac doesn't recognise your iOS device

This is the Apple device and iTunes conundrum. Apple uses iTunes to manage all of its iPod and iOS devices – a task that includes fixing, updating and restoring any software. But what if iTunes doesn't recognise your iPod or iOS device?

This seems to particularly affect owners of iPod classic, iPod nano and iPod shuffle devices and Windows computers. But a non-recognised Apple device can occur with the newer iOS-based devices: iPhone, iPad and iPod touch (and it can happen on both Windows and Mac). In this article, we'll look at some steps to follow if you've got a non-responsive Apple device, and how to get iTunes to recognise your iPod, iPhone or iPad.

Check the connection between your iOS device and computer

Before heading into any troubleshooting steps, first make sure that it isn't a problem with the cable.

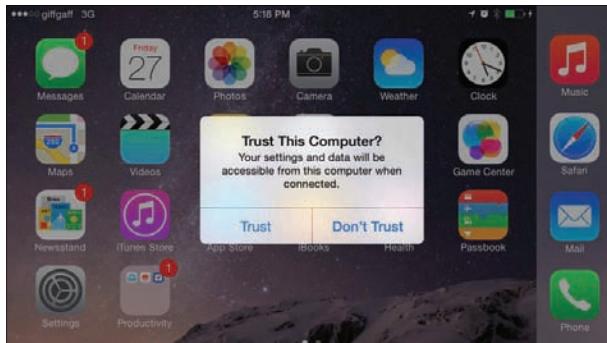
Quickly go through these steps.

- Check the USB cable is connected to both your iPod or iOS device and computer.
- Try a different USB socket on your Mac or PC, and see if that helps.
- Check the Lightning port or 30-pin connection socket on your iPod or iOS device for debris. Sometimes dust gets into the slot and prevents the device from making a connection.
- Try using a different USB cable to connect the device to the computer.

How to make iTunes (on a Windows PC) recognise an iPod, iPhone or iPad

If you've got a Windows computer and don't see the Apple device when you connect it to your computer, follow these steps:

- Turn off your Windows PC and your iOS device, and turn both back on again.



- Update iTunes on your Windows PC. Open iTunes and choose *Help* → *Check for Updates*.
- Watch your iOS device when you plug it into your computer, and check for an alert. Click *Trust*.
- If you see the *Do You Trust this Computer?* alert repeatedly you may not have iTunes installed.

Note that you don't need to put your device into Recovery Mode when following these steps.

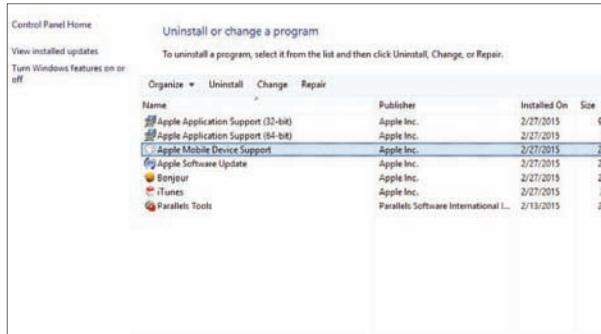
Get iTunes for Windows to recognise an iPod: Check Apple Mobile Device Support

When you install iTunes for Windows you also install a program called Apple Mobile Device Support.

Follow these steps to ensure that Apple Mobile Device is installed.

- Open the Search (in the upper-right in Windows 9, lower-left in Windows 10) and search for Control Panel.
- Click *Uninstall a Program*.
- Check that Apple Mobile Device Support is listed in the current programs.

If you can't see Apple Mobile Device Support then you need to reinstall iTunes for Windows.



If you have trouble doing so, or see “error 7” or “error 2” after installation, then follow the steps at tinyurl.com/nhe75os.

Make iTunes (on a Mac) recognise an iPod, iPhone or iPad

It is less likely (although still possible) for an Apple Mac to be unable to recognise an iPod or iOS device. In this case, you should check the following:

- Check your USB connection – in particular, check the socket for dust and residue.
- Try a different USB port.
- Try a different USB cable.
- Make sure you have tapped the Trust button on your iOS device when you connect it to your Mac.
- Restart your iOS device, or restart your iPod.
- Restart your Mac.
- Check for Software Updates on your Mac.

If you have any security software installed, then this could be causing a problem between iTunes and your Mac.



